

**National Hygiene Services
Monitoring Assessment Report**

Mid-Western Regional Maternity Hospital

Date of monitoring assessment: 16 November 2009

About the Health Information and Quality Authority

The Health Information and Quality Authority is the independent Authority established under the Health Act 2007 to drive continuous improvement in Ireland's health and social care services. The Authority was established as part of the Government's overall Health Service Reform Programme.

The Authority's mandate extends across the quality and safety of the public, private (within its social care function) and voluntary sectors. Reporting directly to the Minister for Health and Children, the Health Information and Quality Authority has statutory responsibility for:

Setting Standards for Health and Social Services – Developing person-centred standards, based on evidence and best international practice, for health and social care services in Ireland (except mental health services).

Monitoring Healthcare Quality – Monitoring standards of quality and safety in our health services and implementing continuous quality assurance programmes to promote improvements in quality and safety standards in health. As deemed necessary, undertaking investigations into suspected serious service failure in healthcare.

Health Technology Assessment – Ensuring the best outcome for the service user by evaluating the clinical and economic effectiveness of drugs, equipment, diagnostic techniques and health promotion activities.

Health Information – Advising on the collection and sharing of information across the services, evaluating, and publishing information about the delivery and performance of Ireland's health and social care services.

Social Services Inspectorate – Registration and inspection of residential homes for children, older people and people with disabilities, where applicable. Monitoring day- and pre-school facilities and children's detention centres; inspecting foster care services.

1 Background and Context

Good hygiene practices play a key role in the reduction of the occurrence of Healthcare Associated Infections. In Ireland, the cleanliness of hospitals has been assessed since 2004. In 2007 and 2008, the Health Information and Quality Authority (the Authority) undertook two independent national hygiene services quality reviews to monitor the compliance of 50 hospitals with the National Hygiene Services Quality Standards. As part of these reviews, the Authority carried out a number of follow-up visits to hospitals where serious risks had been identified.

The Authority published national and individual hospital reports following the 2007 and 2008 reviews which are available on the Authority's website www.hiqa.ie. These reports contained several recommendations for the hospitals as well as the Health Service Executive (HSE).

Following the Authority's hygiene review in 2008, each hospital was asked to prepare plans and implement the necessary improvements that reflected the findings from the 2008 National Hygiene Services Quality Review. In response to these recommendations, the HSE applied "targeted interventions" to hospitals that had been identified as needing more support. In May 2009, the HSE made its findings publicly available in a national improvement strategy for all hospitals (available from www.hse.ie). The main conclusions from the 2008 National Review were that hospitals should continue to strive towards excellence in their management of hygiene and aim to achieve the highest level of compliance against the Standards.

In May 2009, the Authority launched the new *National Standards for the Prevention and Control of Healthcare Associated Infections*. Whilst incorporating the key quality and safety requirements for hygiene services, these standards focus on a broader set of issues rather than solely on hygiene. They were approved by the Board of the Authority and mandated by the Minister for Health and Children. They represent a critical component in supporting the ongoing requirement to prevent and control Healthcare Associated Infections in Ireland.

All services are expected to undertake a gap analysis¹ in relation to the new National Standards for the Prevention and Control of Healthcare Associated Infections. Implementation plans should encompass a programme of changes leading to compliance with these standards in acute hospitals by 1 June 2010.

¹ The Authority expects the HSE to carry out national and local gap analyses for its directly managed services and to develop a nationally coordinated, prioritised implementation plan informed by these gap analyses. In the voluntary and independent sectors, and services led by independent practitioners, the Authority expects that a local plan will be developed. For such services funded by the HSE, its network or local health office management structure should ensure facilities have a local implementation plan, the progress against which should become part of the reporting requirements within any service level agreement between the provider and commissioner of the service.

From this date, in relation to Healthcare Associated Infections, acute hospitals will be monitored by the Authority for compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections* only. The monitoring of compliance with the new standards will take into account the key quality and safety requirements of the hygiene standards.

Each hospital in Ireland should provide care in an environment that is clean. Patients and their families expect to receive high quality, safe care that meets their needs. The recent Healthcare Associated Infection and communicable/transmissible disease outbreaks, have highlighted the continued need to “raise the bar” in the delivery of hygiene services.

At this stage the Authority expects that all hospitals in Ireland are achieving levels of compliance greater than 85%, with the essential requirements to deliver safe, efficient and effective hygiene services as set out in the National Hygiene Services Quality Standards. This latest series of randomised unannounced monitoring assessments focuses specifically on the day-to-day delivery of hygiene services and in particular cleanliness, hand hygiene and waste and linen management practices.

This report presents the findings of such a monitoring assessment.

2 Focus of the Monitoring Assessment

For this monitoring assessment, the Authority's focus was on the delivery of hygiene services. The Service Delivery (SD) Standard 4 contains seven core criteria. Each criterion contains specific compliance requirements that, taken together, are essential elements for the provision of safe, efficient and effective hygiene services (Appendix 1 contains the full list of the National Hygiene Services Quality Standards).

Service Delivery (SD) Standard 4:

Hygiene services are delivered safely, efficiently and effectively.

SD 4.1 The team ensures the organisation's physical environment and facilities are clean.

This refers to the overall cleanliness of the physical environment. Services should be provided in an environment that is clean and hospitals should have systems in place to ensure that high levels of cleanliness are maintained.

SD 4.2 The team ensures the organisation's equipment, medical devices and cleaning devices are managed and clean.

This refers to the implementation of cleaning practices to ensure that all medical and cleaning devices are clean and that systems exist to ensure that high levels of cleanliness are maintained.

SD 4.3 The team ensures the organisation's cleaning equipment is managed and clean.

This refers to the implementation of cleaning practices to ensure that all cleaning equipment is clean and that systems exist to ensure that the equipment is maintained to a high standard.

SD 4.4 The team ensures the organisation's kitchens, including ward/departmental kitchen, are managed and maintained in accordance with evidence-based best practice and current legislation.

This refers to the overall cleanliness of ward/departmental kitchens to ensure that areas where food is prepared, organised and/or handled is clean and that systems exist to maintain appropriate hygiene practices in kitchens.

SD 4.5 The team ensures the inventory, handling, storage, use and disposal of hygiene services hazardous materials, sharps and waste in accordance with evidence-based codes of best practice and current legislation.

This refers to the management of hazardous materials, sharps and waste, including inventory, handling, segregation, storage, use and disposal, to ensure the safety of all service users is protected.

SD 4.6 The team ensures the organisation's linen supply and soft furnishings are managed and maintained.

This refers to the management, segregation, maintenance and safe handling of linen and soft furnishings to ensure that all linen and soft furnishings are clean and that systems exist to ensure that they are maintained to a high standard.

SD 4.7 The team works with the Governing Body and / or its Executive Management Team to manage hand hygiene effectively and in accordance with Strategy for the Control of Antimicrobial Resistance in Ireland (SARI) guidelines.

Hand hygiene is recognised as the single most important preventative measure in the transmission of Healthcare Associated Infections, particularly in health services. In the 2008 national hygiene review the Authority focused on hand-washing technique. With the current pandemic H1N1 influenza, it is essential that a culture of hand hygiene is embedded and that every opportunity for hand hygiene is taken. During this monitoring assessment, the Authority focused on opportunities for hand hygiene and whether or not staff took these opportunities and used the correct technique.

The Authority expects hospitals to have in place well-established arrangements to achieve levels of compliance greater than 85% with the requirements of these core criteria, and the necessary evidence to demonstrate such compliance.

It must be emphasised that findings from these monitoring assessments reflect a point in time and may not reflect the fluctuations in the quality of hygiene services (improvement or deterioration) over an extended period of time. However, as patients do not always choose which day they attend hospital, the Authority's unannounced one-day assessment is an indicator of how patients, in a given hospital, experience arrangements for hygiene.

3 Monitoring Process

The monitoring methodology consisted of an unannounced on-site assessment to monitor compliance with the Service Delivery Standard 4 listed previously. The process (outlined in table 1 below) sought to draw on multiple sources of information to assess compliance with Service Delivery Standard 4.

Table 1: Evidence gathering processes

Process or instrument for gathering evidence	Contribution to the monitoring process
Observation	To obtain information about the environment, practices and patient experience. Structural and equipment observation undertaken in a range of clinical and non-clinical areas.
Documentation review	To assess documentary evidence to establish whether the hospital complied with the requirements of the service delivery standard.
Patient interview	To elicit the views of service users to assist the monitoring team in their deliberations.
Staff interview	To assess the roles, responsibility and quality assurance mechanisms.

There were three phases to this monitoring process: pre-visit, on-site visit, and follow up and reporting.

3.1 Before the on-site visit

The main elements of the process prior to the site visit were as follows:

- The Authority prepared a confidential schedule for the monitoring assessments, with the unannounced assessment dates for each hospital selected at random.
- Selection of patient areas: the number of patient areas selected was proportionate to the type of services provided and the size of the hospital and at a minimum included, as relevant, one medical and one surgical ward, the emergency department, outpatient department, laundry and waste areas:
 - Category one hospitals (up to 150 beds): the Authority selected a minimum of four patient areas to be visited
 - Category two hospitals (151 – 450 beds): the Authority selected a minimum of six patient areas to be visited
 - Category three hospitals (greater than 450 beds): the Authority selected a minimum of eight patient areas to be visited.

3.2 During the visit

During the visit the following took place:

- The monitoring assessment of compliance with the National Hygiene Services Quality Standards, with a focus on Service Delivery Standard 4, was undertaken by a team of trained assessors from the Authority. Each team member had been authorised by the Minister for Health and Children to conduct the assessments under section 70 of the Health Act 2007.
- Where authorised persons identified specific issues that they believed could present a significant risk to the health or welfare of patients, hospitals were formally notified in writing of where action was needed, with the requirement to report back to the Authority with a plan to reduce and effectively manage the risk within a specified period of time.
- Hospitals were rated by the team against Service Delivery Standard 4. Evidence was gathered in a number of ways outlined in table 1 and based on this evidence the monitoring team assigned a rating to the seven core criteria. The compliance rating scale used for this is shown in table 2.

Table 2: Compliance rating score

A	The organisation demonstrated exceptional compliance of greater than 85% with the requirements of the criterion.
B	The organisation demonstrated extensive compliance of between 66% and 85% with the requirements of the criterion.
C	The organisation demonstrated broad compliance of between 41% and 65% with the requirements of the criterion.
D	The organisation demonstrated minor compliance of between 15% and 40% with the requirements of the criterion.
E	The organisation demonstrated negligible compliance of less than 15% with the requirements of the criterion.

Please note, the percentage compliance within any rating covers a range of performance. For example, 66% compliance will be rated as a B as would 85% compliance.

3.3 Following the visit

Following the visit, the quality assurance process was as follows:

- A draft report was compiled based on the findings of the monitoring assessment. The report highlights the areas where the hospital has not achieved greater than 85% compliance with the requirements of the criteria.
- Each report was reviewed by the Authority to ensure consistency and accuracy.
- The draft report was provided to each hospital, outlining their compliance ratings. The hospital was given an opportunity to comment on the factual accuracy of the findings and all comments were considered fully by the Authority.
- The final published report was based on the findings, the level of compliance of each organisation with the Standard and confirmation of the factual accuracy of these findings.
- The Authority reports on its findings publicly and, in accordance with section 8(1)(I) of the Act, will (as necessary) advise the Minister for Health and Children and the Health Service Executive as to the level of compliance with the Standard by the hospital visited.

4 Hospital profile

4.1 Hospital – organisational profile

Mid-Western Regional Maternity Hospital is a stand-alone maternity hospital providing obstetric and neonatology services for Limerick, Clare and Tipperary North.

The hospital has a bed complement of 99 beds, 99 of which were open on the day of the visit.

4.2 Areas visited

The Mid-Western Regional Maternity Hospital was visited on 16 November 2009, between 12.00hrs and 15.00hrs. During the monitoring of compliance with the *National Hygiene Services Quality Standards*, the following areas were visited:

Maternity 1	Maternity 2
Maternity 3	Outpatient department
Waste compound	Laundry services.

5 Findings and Compliance Ratings

5.1 Main findings

Service Deliver (SD) Standard 4:

Hygiene services are delivered safely, efficiently and effectively.

The Service Delivery (SD) Standard 4 describes seven core criteria that must be complied with to meet the requirements for the provision of safe, efficient and effective hygiene services.

SD 4.1 The team ensures the organisation's physical environment and facilities are clean.

Rating: D (15-40% compliance with this criterion)

- In the majority of the areas visited, the standard of hygiene was poor.
- A high level of dust was observed on high and low surfaces and in vents in all clinical areas visited.
- Chipped wall paint and sticky tape residue on fixtures and fittings was observed in all areas visited.
- Inappropriate items, such as cleaning products, were observed in the bathrooms in two of the areas visited.
- The grouting in the bathrooms/showers in three of the areas visited had a residue with a mould-like appearance on it.
- Ceiling fans in three of the four areas visited were dusty. Through interview, it was reported that these fans were used regularly.
- Fabric chairs were observed throughout the outpatient department.
- Checklists for cleaning were observed in each of the areas visited.
- Sluice rooms and store rooms were observed to be cluttered in two of the four areas visited, with boxes on the floor that impeded cleaning.
- Alcohol-based hand gel nozzles were sticky and required cleaning in one of the areas visited.
- Cloth curtains around beds were observed to be clean and were reported to be changed every three months, or more often if required. A documented curtain changing process was demonstrated. Shower curtains were reported to be changed as required by the ward attendant. One shower curtain observed in Maternity 1 was not visibly clean.

SD 4.2 The team ensures the organisation's equipment, medical devices and cleaning devices are managed and clean.

Rating: C (41-65% compliance with this criterion)

- Equipment was visibly not clean, in particular the cardiocotograph machines in two of the areas visited.
- A number of cot mattresses and bed mattresses were observed to be torn, in two of the areas visited.
- Tabletop fans were observed to be dusty in clinical areas and store rooms in three of the four areas visited were dusty.
- A number of bedpans observed were not clean in two of the areas visited.
- There was evidence of light dust and sticky tape residue on equipment and medical devices in each of the areas visited.
- Equipment was reported to be cleaned after each patient use and on a regular basis, as per a cleaning schedule. Cleaning schedules were attached to each piece of equipment.

SD 4.3 The team ensures the organisation's cleaning equipment is managed and clean.

Rating: C (41-65% compliance with this criterion)

- The segregation of cleaning and catering duties was not clearly defined.
- A colour-coding system was demonstrated.
- Personal Protective Equipment was observed to be readily available.
- Attendants reported to the ward manager who supervised cleaning processes.
- While it was observed that the cleaning equipment in use was generally clean, trolleys were stored in the sluice room of two of the areas visited.
- Cleaning products were also observed to be stored in two sluice rooms that were not locked.
- Documented cleaning procedures were not followed.

SD 4.4 The team ensures the organisation's kitchens (including ward/department kitchens) are managed and maintained in accordance with evidence-based best practice and current legislation.

Rating: D (15-40% compliance with this criterion)

- Fixtures, appliances and cupboards were observed to be dusty, with a layer of grime present in two of the three ward kitchens visited.
- The segregation of catering and cleaning duties was not clearly defined.
- The fridge in the Maternity 3 kitchen was being utilised as a staff fridge.
- There was a fridge designated for the storage of staff food only in the Maternity 3 kitchen. However, breast milk was observed in this fridge.
- There were food waste disposal units in each kitchen; however, food was observed sitting on the top of one of these units.

- Kitchen cleaning equipment was observed stored with the ward cleaning equipment in each of the kitchens visited. Mop handles were visibly not clean.
- Kitchen staff reported that they wore Personal Protective Equipment (PPE) for serving food.
- Ward kitchen food safety policies were not demonstrated. However, staff reported that these were available in the main kitchen.
- Fly screens were observed, however, the screen was open in one area visited.
- Bait boxes were observed in two of the three ward kitchens visited.
- Access to ward kitchens was restricted to designated personnel through signage identifying no unauthorised personnel, on two of the three kitchen doors. However, two kitchen doors were held open.
- Separate hand-wash facilities were observed in each of the three areas visited.

SD 4.5 The team ensures the inventory, handling, storage, use and disposal of Hygiene Services hazardous materials, sharps and waste is in accordance with evidence-based codes of best practice and current legislation.

Rating: C (41-65% compliance with this criterion)

- Poor segregation of clinical and non-clinical waste was observed in two of the four areas visited and it was observed that the safety lids on a large number of sharps bins were in the open position.
- The assessment team observed waste and used laundry being transported together.
- A local waste management policy was demonstrated. However, on the day of the visit departmental managers did not always know where to locate this policy.
- Signage regarding segregation of waste was observed.
- The appropriate waste destruction documentation (C1 and destruction certificates) as well as the licence and permit were demonstrated.
- The organisation demonstrated local inventories of relevant safety data sheets.
- The waste compound was locked and all bins within it were also locked. It was observed that all healthcare risk waste bags were tagged, as per the waste policy.

SD 4.6 The team ensures the organisation's linen supply and soft furnishings are managed and maintained.

Rating: C (41-65% compliance with this criterion)

- Linen was stored on wooden shelves in the central storage area.
- High dust levels were observed in one of the linen storage rooms visited.
- The organisation demonstrated that a linen policy was in place. However, in three of the areas visited, the departmental managers were unfamiliar with where to locate this policy.
- Inappropriate items, such as patient's shoes and hoists, were observed in two of the clean linen storage rooms, which were also cluttered.
- Linen was observed to be clean and in good condition.

SD 4.7 The team works with the Governing Body and/or its Executive Management team to manage hand hygiene effectively and in accordance with the Strategy for the Control of Antimicrobial Resistance in Ireland guidelines.

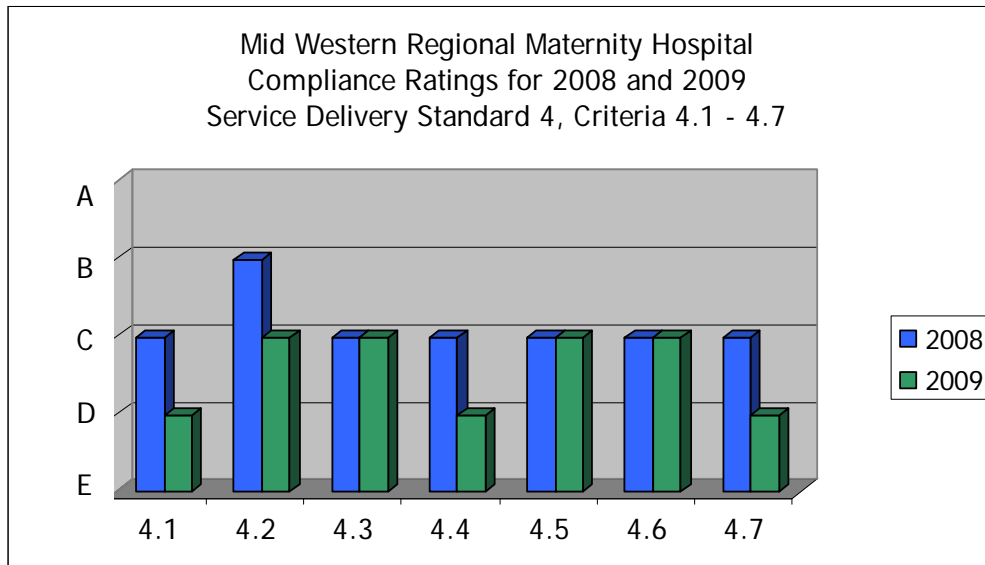
Rating: D (15-40% compliance with this criterion)

- The majority of the sinks and taps did not comply with the HSE's Health Protection Surveillance Centre's Guidelines 2005.
- Sinks were not visibly clean in two of the areas visited.
- Hand-wash posters were on display at each hand-wash sink in the areas visited.
- Attendance at hand hygiene training was reported to be mandatory and records of attendance were maintained centrally. Attendance rates were demonstrated for attendants and midwifery/nursing staff. However, the organisation did not demonstrate attendance records for other grades of staff.
- Alcohol-based hand gels were available throughout the organisation
- Hand hygiene training was provided by a small number of staff, for example, ward managers, who had been trained by the regional Infection Control Team. However, the organisation did not demonstrate through interview that these staff had protected time to provide this training.
- The organisation demonstrated that they monitored hand hygiene practices through audits. However, the assessment team observed that they did not take into account the number of non-compliant hand-wash basins in these audits.
- Hand-washing opportunities were observed in clinical areas. However, during observation:
 - not all opportunities to practice hand hygiene were taken
 - the hand-washing technique used did not always comply with best practice.

5.2 Ratings Summary

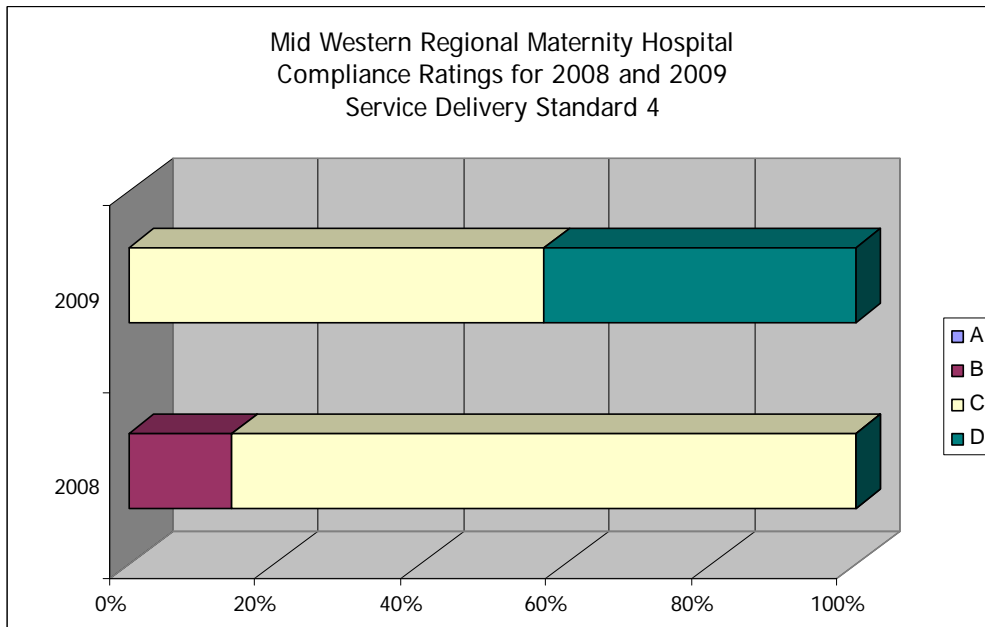
The graph below (graph 1) illustrates the organisation's individual ratings for each of the criteria under Service Delivery Standard 4 – implementing hygiene services – in comparison with the equivalent 2008 ratings.

Graph 1



The graph below (graph 2) illustrates the organisation's level of compliance (A to D) with the seven core criteria of Service Delivery Standard 4 in comparison with 2008.

Graph 2



5.3 Conclusion

The Mid-Western Regional Maternity Hospital's level of performance in relation to the delivery of hygiene services had substantially deteriorated when compared to 2008. The monitoring assessment found that the Mid-Western Regional Maternity Hospital did not meet the requirements in relation to Service Delivery Standard 4 to ensure that the key aspects of hygiene services are delivered safely, efficiently and effectively.

The Authority expects that all hospitals achieve levels of compliance over 85% with all of the National Hygiene Services Quality Standards, including the seven core criteria of Service Delivery Standard 4.

In three of the core criteria of Service Delivery Standard 4, the Mid-Western Regional Maternity Hospital achieved less than 40% compliance; in the remaining four core criteria the hospital achieved less than 65% compliance.

The Mid-Western Regional Maternity Hospital must address the significant shortfalls in performance in order to provide safe, efficient and effective hygiene services.

The Authority has issued a risk letter to the Mid-Western Regional Maternity Hospital requesting an appropriate action plan be submitted by 18 December 2009.

Appendix 1

The National Hygiene Services Quality Standards

Standards for Corporate Management

The Corporate Management Standards allow an organisation to assess and evaluate its activities in relation to Hygiene Services at an organisational management level. Responsibility for these Standards lies with the Governing Body and Executive Management Team in conjunction with the Hygiene Services Committee. There are 14 Standards within the Corporate Management Standards, all of which are focused on four critical areas that are leadership and partnerships, environment and facilities, human resources and information management. Eight criteria within these Standards are core.

The 14 Standards are as follows:

- 1. Planning and Developing Hygiene Services:** organisational planning in response to the changing needs of the population it serves in relation to hygiene services.
- 2. Linkages and Partnerships:** organisational linkages and how it works in partnership with patients/clients, staff, other organisations and the community.
- 3. Corporate Planning:** strategic planning to achieve identified goals in relation to hygiene services.
- 4. Governing and Managing Hygiene Services:** effective and efficient governance for hygiene services.
- 5. Organisational Structure:** defined organisational structures to ensure the co-ordinated provision of hygiene services.
- 6. Allocating and Managing Resources:** allocation, protection, management and control of human, physical and financial resources for the hygiene services.
- 7. Managing Risk:** assessment, management and prevention of risk in relation to hygiene services.
- 8. Contractual Agreements:** shared responsibility for the delivery of hygiene services involving contractual services.
- 9. Physical Environment, Facilities and Resources:** effective and efficient planning and management of the organisation's physical environment, facilities and resources.

10. Selection and Recruitment of Hygiene Staff: selection, recruitment and retention of adequate and appropriate human resources.

11. Enhancing Staff Performance: orientation/induction, ongoing education, training and continuous professional development and evaluation of Hygiene Services staff performance.

12. Providing a Healthy Work Environment: safe, healthy and positive work environment for all Hygiene Services staff.

13. Collecting and Reporting Data and Information: timely, efficient, accurate and complete collection and reporting of relevant hygiene services data and information.

14. Assessing and Improving Performance: quality improvement systems for monitoring, evaluating and improving the quality of the organisation's Hygiene Service delivery.

Standards for Services Delivery

The Service Delivery Standards allow an organisation to assess and evaluate its activities in relation to Hygiene Services at a team level. These Standards relate directly to operational day-to-day work and responsibility for these Standards lies primarily with the Hygiene Services Team (the team) in conjunction with ward/departmental managers and the Hygiene Services Committee. There are seven core criteria within these Standards.

The 6 Service Delivery Standards are as follows:

1. Evidence-based Best Practice and New Interventions in Hygiene Services: establishment, adoption, maintenance and evaluation of best practice guidelines and establishing processes for new interventions.

2. Prevention and Health Promotion: health and hygiene promotion and encouraging individuals to take responsibility for their own health.

3. Integrating and Coordinating Hygiene Services: integration and coordination of hygiene services.

4. Implementing Hygiene Services: safe, efficient and effective hygiene services.

5. Patients'/Clients' Rights: promoting and protecting patients'/clients' rights.

6. Assessing and Improving Performance: quality improvement, managing risk and managing utilisation of services to improve the quality of the hygiene services and the performance of the team.