Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Hygiene Services Assessment Scheme

Assessment Report October 2007

St. Finbarr's Hospital

Table of Contents

1.0 Executive Summary

1.1 Introduction

This is the first National Hygiene Services Assessment Scheme (HSAS.) It is a mandatory scheme for all acute hospitals. The scheme aims to enhance cultural change in the area of hygiene services by not only focusing on the service delivery elements but also emphasising the importance of standards for corporate management. The HSAS is a patient-centred scheme which assists a hospital to prioritise the key areas in hygiene to be addressed. It is intended to promote a culture of best practice and continuous quality improvement.

The Irish Health Services Accreditation Board developed these, the first set of National Hygiene Assessment Standards in 2006. This development plan involved an extensive desktop review of national and international best practice literature, working groups and extensive consultation. The feedback from these development components formed the final draft Standards and Assessment Process, which were then piloted in a number of acute hospitals. *(The Irish Health Services Accreditation Board was subsumed into the Health Information and Quality Authority in May 2007.)*

The Hygiene Services Assessment Scheme (HSAS) was launched by the Minister for Health Mary Harney on the 6th November 2006.

Hygiene is defined as:
"The practice that serves to keep people and environments clean and prevent infection. It involves the study of preserving one's health, preventing the spread of disease, and recognising, evaluating and controlling health hazards. In the healthcare setting it incorporates the following key areas: environment and facilities, hand hygiene, catering, management of laundry, waste and sharps, and equipment" [1-4]

More specifically, the Hygiene Services Assessment Scheme incorporates the following:

- Environment and Facilities: incorporates the condition of the building and all its fixtures, fittings and furnishings.
- Hand Hygiene: incorporates hand washing, antiseptic hand-rub and surgical hand antisepsis.
- Catering: incorporates kitchens (including ward kitchens) fixtures and fittings and food safety.
- Management of Laundry: incorporates management of linen and soft furnishings both in-house laundry and external facilities.
- Waste and Sharps: incorporates handling, segregation, storage and transportation.
- Equipment: incorporates patient, organisational, medical and cleaning equipment.

1.1.1 Standards Overview

The standards are divided into two sections: Corporate Management and Service Delivery. Each standard is divided into a number of criteria. These are specific steps, activities or decisions that must occur to achieve the standard.

The 14 Corporate Management standards facilitate the assessment of performance with respect to hygiene services provision to the organisation and patient clients at organisational management level. These standards commence at the planning stage and follow through to governing, implementation and evaluation. They incorporate four critical areas:

- Leadership and Partnerships
- Management of the Environment and Facilities
- Management of Human Resources
- Information Management.

The six Service Delivery standards facilitate the assessment of performance at team level. The standards address the following areas:

- Evidence based best practice and new interventions
- Prevention and Health Promotion
- Integration and coordination of hygiene services
- Implementing safe, efficient and effective hygiene services
- Protection of patient/clients rights
- Assessing and Improving performance. [5]

The standards and process have been assessed and internationally accredited by the International Society for Quality in Healthcare (ISQua).

Core Criteria:

To ensure that there is a continual focus on the principal areas of the service, 15 core criteria have been identified within the standards to help the organisation and the hygiene services to prioritise areas of particular significance.

In the Corporate Management standards, the core criteria cover:

> Allocation of resources, accountability, risk management, contract management and human resource management.

In the Service Delivery standards, core criteria cover:

> Waste management, hand hygiene, kitchens and catering, management of linen, equipment, medical and cleaning devices and the organisation's physical environment.

1.1.2 Rating Scale

The rating of individual criterion is designed to assist self-assessment teams and the organisation in general, to prioritise areas for development. The rating for the criterion can be determined based on the percentage level of compliance.

The rating scale utilised by the Hygiene Services Assessment Process is a five-point scale:

A Compliant - Exceptional

- There is evidence of exceptional compliance (greater than 85%) with the criterion provisions.

B Compliant - Extensive

- There is evidence of extensive compliance (between 66% and 85%) with the criterion provisions.

C Compliant - Broad

- There is evidence of broad compliance (between 41% and 65%) with the criterion provisions.

D Minor Compliance

- There is evidence of only minor compliance (between 15% and 40%) with the criterion provisions.

E No Compliance

- Only negligible compliance (less than 15%) with the criterion provisions is discernible.

N/A Not Applicable

- The criterion does not apply to the areas covered by the Self Assessment Team. Rationale must be provided. This cannot be used for a core criterion.

1.1.3 Assessment process components

The assessment process involves four distinct components:

- **Preparation and self assessment undertaken by the organisation.**

The self-assessment process allows an organisation to systematically evaluate its hygiene services against a set of best practice standards. This was completed by a multidisciplinary team(s) over a period of two months. This process was preceded by regional education sessions.

- **Unannounced assessment undertaken by a team of external assessors**

The HIQA has recruited senior professionals from the areas of medicine, nursing and corporate management as assessors, in addition to independent senior professionals with specialist knowledge in the core areas. To assure consistency across all sites four leaders were chosen from this group to cover all unannounced visits. The assessor's performance was regularly evaluated based on feedback from participating organisations, HIQA staff and other assessors.

Site visits for the larger academic teaching hospitals were completed over 2.5 days with four assessors, and assessments were completed in the smaller hospitals over 2 days with three assessors. The assessment team were responsible for identifying the organisation's compliance with the standards and helping to guide its improvement.

The assessment included a comprehensive documentation review, meetings with management, staff and patients. Throughout the assessment process the assessors worked as a team to cross reference their findings. This ensured that the ratings for each criterion were agreed upon and reflected an accurate picture of the organisation's level of compliance. Feedback was provided to the Chief Executive / General Manager and senior management team by the Assessment Team Leader, at the end of each day of the assessment.

- **Provision of an outcome report and determination of award status.**

The Internal Review Committee of the HIQA reviewed all the reports to ensure consistency, and based on the quantifiable translation guidelines, awards were made. Only organisation's which received a "very good" score were acknowledged with an award for the duration of one year. By the end of

October 2007 all 51 acute care hospitals had received a copy of their individual report.

At the same time the HIQA launched a National Report of the findings of all assessment reports. These standards are different from the first two hygiene audits, therefore a direct correlation of results were not possible.

- **Continuous Improvement**

Going forward a quality improvement plan should now be structured from the self assessment and recommendations from the external report. This will then be monitored by the HIQA.

The areas of notable practice, quality improvement plans, areas of priority action, overall score, criterion ratings and comment and are presented in the following pages of the report.

[1] Boot, M and Cairncross, S "Actions Speak" Delft, The Netherlands, IRC and LSTHM, British Occupational Hygiene Society.

[2] New York Department of Health and Mental Hygiene

[3] The Columbia Electronic Encyclopaedia, Sixth Edition. Columbia University Press. 2003

[4] Irish Acute Hospitals Cleaning Manual, HSE (2006)

[5] Hygiene Services Assessment Scheme. Irish Health Services Accreditation Board (2006)

1.2 Organisational Profile

St. Finbarr's is an acute hospital, providing its services to the catchment area of South Lee (Cork). It was formerly part of the Cork University Hospital Group, but transferred to PCCC governance on 1 July 2007. The Hospital has a compliment of 284 beds.

Services provided

- Elderly Services Rehabilitation (80 beds)
- Pulmonary (TB) (6 step-down beds)
- Continuing care
    - Psychiatry (43 beds)
    - Elderly (134 beds)
    - Disability (21 beds)
- Elderly services day hospital (this operates as an out-patient facility with approximately 15-20 patients attending daily for bloods, therapy, etc.)

There are no day beds in the hospital.

Physical Structures:

There are no negative or positive pressure rooms in the hospital. Four single rooms in the Rehabilitation Unit are used for isolation purposes according to the needs. In addition, all six rooms in the TB Unit are dedicated isolation rooms.

The following assessment of St. Finbarr's Hospital took place between 11th and 12th September 2007.

1.3 Notable Practice

- Cleanliness of the Day Hospital.
- Hazard Analysis and Critical Control Point (HACCP) systems within the main kitchen.
- Sharps management at ward level.
- Efforts undertaken towards progressing recycling of waste.
- The overall awareness by staff of the importance of a high standard of hygiene services.
- The involvement of management in the development of hygiene services.
- There was a high level of patient/client focus in the hygiene service.

1.4 Priority Quality Improvement Plan

- Introduction of a systematic process for audit evaluation and feedback.
- Establishment of Hygiene Services Team should be progressed.
- Development of a Hygiene Services Plan should be progressed to reflect strategic, annual and operation issues.
- Development of an annual report.
- Appointment of designated waste office should be considered.

- Investigation of methods of reduction of handling of clinical waste should be carried out.
- Documented processes for the management of linen and waste should be developed.
- Further upgrading of sinks should be progressed.
- Elimination of the use of fans and tea towels should be considered.
- Monitoring of external contractors should be reviewed.
- Involvement of patient/client/clients and the public in the development of hygiene services is recommended.

1.5 Hygiene Services Assessment Scheme Overall Score

The decision mechanism used to translate an organisation's criteria, risk ratings to a Hygiene Service Assessment Scheme score is based on a quantitative analysis of the assessment results which ensures consistency of application. The decision regarding a score is made by the Internal Review Committee of HIQA, based on the findings of the Assessment Team; the St. Finbarr's Hospital has achieved an overall score of:

Fair

Award Date: October 2007

1.6 Significant Risks

CM 10.4 (Rating D)
There is evidence that the contractors manage contract staff effectively.

Potential Adverse Event
Sub optimal catering service provided.

Risks

Likelihood of Event	Rated: M (2)
Impact of Event	Rated: M (2)
Urgency of Action	Rated: M (2)
TOTAL	**Total: 6**

Recommendations
The organisation is recommended to ensure that the external catering facility meets the hygiene standards required for a safe catering service to staff and public.

2.0 Standards for Corporate Management

The following are the ratings for the Corporate Management standards, as validated by the Assessment team. The Corporate Management standards allow the organisation to assess and evaluate its activities in relation to Hygiene Services at an organisational level. There are fourteen Corporate Management standards, all of which are focused on four critical areas: leadership and partnerships, environment and facilities, human resources and information management. They include such subjects as corporate planning, allocating and managing resources, enhancing staff performance and contractual agreements. There are eight core criteria within these standards.

PLANNING AND DEVELOPING HYGIENE SERVICES

CM 1.1 (C → C)

The organisation regularly assesses and updates the organisation's current and future needs for Hygiene Services.

Evidence of a limited hygiene needs assessment was carried out and noted as part of the transfer of the acute services to the campus at Cork University Hospital. Compliance with codes of best practice and legislation was noted, including a national cleaning manual, waste management guidelines and Strategy for the control of Antimicrobial Resistance in Ireland (SARI) hand hygiene guidelines.

The acute services link with the community through an extensive Elderly Care Programme, the management structure, and Cork University Hospital. No Corporate Strategic Hygiene Plan or Service Plan has been compiled.

It is recommended that an overall one be formulated and the needs assessment process for the hygiene services be evaluated.

CM 1.2 (B ↓ C)

There is evidence that the organisation's Hygiene Services are maintained, modified and developed to meet the health needs of the population served based on the information collected.

Evidence was noted of substantial changes to hygiene services as a result of previous and on-going internal and external audits. Modification to, and refurbishments of, ward kitchens, sluices, new patient/client beds replacement programme, water tanks and upgrading to electrical works were noted. Informal evaluation of the efficacy of the new upgrades was noted in minutes of the Ward Manager and Hygiene Services Committee meetings. No formal evaluation of the modifications and upgrading has been completed. Staff has a limited segregation of duties in place in areas such as ward kitchen, floors, toilets and clinical areas. It is recommended that evaluations of these be completed.

ESTABLISHING LINKAGES AND PARTNERSHIPS FOR HYGIENE SERVICES

CM 2.1 (C → C)

The organisation links and works in partnership with the Health Services Executive, various levels of Government and associated agencies, all staff, contract staff and patients/clients with regard to hygiene services.

Evidence was noted of documented processes, which support the linkages of the hospital, in particular with Cork University Hospital and the Elderly Care Services. An Elderly Care Quality Improvement Team meets every six weeks and minutes of

meetings and project plans were noted. There were internal documented processes for departmental meetings. National linkages are managed through the management structure at Cork University Hospital.
Evidence was noted of the evaluation and Quality Improvement Plans (QIPs), of the Elderly Care Quality Improvement Committee.

CORPORATE PLANNING FOR HYGIENE SERVICES

CM 3.1 (C → C)
The organisation has a clear corporate strategic planning process for Hygiene Services that contributes to improving the outcomes of the organisation.
The organisation has a documented process for the development of the Corporate Hygiene Service Plan; however it was not developed at the time of the assessment. It is recommended that one be produced.

GOVERNING AND MANAGING HYGIENE SERVICES

CM 4.2 (C → C)
The Governing Body and / or its Executive Management Team regularly receive useful, timely and accurate evidence or best practice information.
The hospital management and hygiene services teams receive results of internal and external audits. Evidence of this was observed in management team meetings, risk, health and safety and hygiene committee agendas and minutes. Evidence was available of best practice hygiene guidelines. Information may be available through comment cards in the future. However, to date, no information has been received, with the exception of the Aging Review Initiative.
Best practice issues have been documented and reviewed at Hygiene Services Committee meetings. Evaluation of information is informally carried out. It is recommended that national hygiene guidelines be adapted to reflect local practice and procedures.

CM 4.5 (C → C)
The Hygiene Services Committee is involved in the organisation's capital development planning and implementation process.
Hygiene service issues were taken in to account during a Capital Development Programme through the involvement of the Infection Control Officer, clinical managers and hospital management on capital projects. A Capital Refurbishment Programme is about to commence in two wards and informal evidence was available that relevant staff have been consulted and included. Capital project meeting minutes were noted.
It is recommended that the hospital formalise documented processes for the management of these.

ORGANISATIONAL STRUCTURE FOR HYGIENE SERVICES

*Core Criterion

CM 5.1 (C → C)

There are clear roles, authorities, responsibilities and accountabilities throughout the structure of the Hygiene Services.

Evidence was provided of the hygiene structures at the hospital through the roles, responsibilities and job descriptions of approved hygiene grades of staff such as Domestic Supervisor, household staff, professional, departmental and senior management. The authority for the management of hygiene services has been informally delegated to the Hygiene Services Committee. It is recommended that formal hygiene structures and accountabilities be developed.

*Core Criterion

CM 5.2 (C → C)

The organisation has a multi-disciplinary Hygiene Services Committee.

This was noted through agendas and minutes of meetings. The committee participated in the team meeting during the assessment. It had a defined membership at the time of the assessment but had not developed terms of references, or organisational charts. Administrative support for the agenda, minutes and other documentation, was managed by the Infection Control Officer and Domestic Supervisor. The committee has concentrated on the operational issues for the management of hygiene. It meets on a twice-weekly basis and a smaller group of the committee meet weekly.

It is recommended that the hospital review the current committee, to establish a Hygiene Services Committee and Team, in line with the hygiene standard recommendations.

ALLOCATING AND MANAGING RESOURCES FOR HYGIENE SERVICES

CM 6.2 (C → C)

The Hygiene Committee is involved in the process of purchasing all equipment / products.

Limited evidence was available of this. The Central Contracts and Purchasing Department manage the purchase of most hygiene items. Some evidence was available of pre-purchase evaluation on new beds and new seats for the elderly. An evaluation process was put in place, and remedial actions undertaken, to purchase appropriate chairs. It is recommended that this process be evaluated for effectiveness.

MANAGING RISK IN HYGIENE SERVICES

*Core Criterion

CM 7.1 (C → C)

The organisation has a structure and related processes to identify, analyse, prioritise and eliminate or minimise risk related to the Hygiene Service.

The hospital is a member of the Cork University Hospital Group Risk Management Department. There is draft Risk Management Policy available, with a mechanism for incident reporting and reporting to the STARS web system. Hospital health and safety statements were available as were department safety statements and hazard identification sheets. Evidence of a health and safety annual report was available and

external Environmental Health Officer reports were observed as were internal hospital hygiene audits.

CM 7.2 (C → C)

The organisation's Hygiene Services risk management practices are actively supported by the Governing Body and/or its Executive Management Team.

This is controlled by the Senior Management Team. All incidents, reports and complaints are addressed and documented. There has been no major adverse hygiene report in the last two years.

CONTRACTUAL AGREEMENTS FOR HYGIENE SERVICES

*Core Criterion

CM 8.1 (D ↑ C)

The organisation has a process for establishing contracts, managing and monitoring contractors, their professional liability and their quality improvement processes in the areas of Hygiene Services.

The management of contracted services are developed and managed by the Regional Contracts Department. Limited contracts, in areas such as local laundry and washing machine maintenance, are managed by the Supplies Department. The hospital adheres to the principles of the National Procurement Policy. There is limited and informal monitoring of contractors. Issues, which need to be addressed, are informally reported both to service areas and the contractor. A process to ensure all contracts are established, monitored and maintained is recommended. This should be inclusive of the external catering company providing catering to staff and public on the hospital grounds.

PHYSICAL ENVIORNMENT, FACILITIES AND RESOURCES

CM 9.1 (D ↑ C)

The design and layout of the organisation's current physical environment is safe, meets all regulations and is in line with best practice.

The acute Elderly Care facilities are currently the subject of a re-configuration of responsibility review from the Cork University Hospital group to the Primary, Community and Continuous Care sector of the HSE. Acute facilities are based in older buildings on the campus, which have had some upgrading in the intervening years in areas such as sluice rooms and ward kitchen upgrades. Facilities in the rehabilitation wards are in need of extensive renovation and refurbishment. Plans are in place to commence this later this year. The day hospital facilities are in good repair. There has been consultation with all staff in the design of the refurbishments. These will address installation of appropriate wash-hand basins, widening of single room doors (for fire evacuation purposes), extensive painting, and replacement of floor coverings. Details of the current project plan were available during the assessment and all current best practice and legislation is included.

Fire safety procedures are being reviewed and acute Elderly Care services are located on the ground floor, with direct external access for evacuation. It is recommended that fire safety training, and the extension of provision of fire evacuation mattresses, be continued.

*Core Criterion

CM 9.2 (C → C)

The organisation has a process to plan and manage its environment and facilities, equipment and devices, kitchens, waste and sharps and linen.

Policies, procedures and guidelines to support the hygiene process are in place. Internal and external hygiene audits, patient/client satisfaction and risk management procedures influence the decisions of the hospital management and Hygiene Services Committee in their on-going deliberations and action plans. The National Cleaning Manual has been adopted and it is recommended it be adapted to the specific needs of the hospital. It is recommended that the hospital develop its Hygiene Corporate, Service and Organisational Plans.

CM 9.3 (C ↑ B)

There is evidence that the management of the organisation's environment and facilities, equipment and devices, kitchens, waste and sharps and linen is effective and efficient.

Mechanisms of internal and external audits have been used to evaluate the effectiveness and efficiency of the hygiene services. Incident reports from risk management are reviewed, and actions plans formulated, to manage change. Evidence was provided of Quality Improvement Plans for refurbishment, education and training. A review of the Elderly Care service has been undertaken, in conjunction with service users, including environment and facilities. Results were favourable.

CM 9.4 (D ↑ C)

There is evidence that patients/clients, staff, providers, visitors and the community are satisfied with the organisation's Hygiene Services facilities and environment.

The Hospital Manager is the designated Complaints Officer. The hospital has commenced the National Complaints Process and has introduced the 'Your Hospital/Your Say' comment card and procedure. During the assessment comments from patient/clients were found to be favourable to the hygiene services. No adverse comment has been received to-date. No patient/client satisfaction survey for the hygiene services has been carried out. It is recommended that this be done.

SELECTION AND RECRUITMENT OF HYGIENE STAFF

CM 10.1 (C → C)

The organisation has a comprehensive process for selecting and recruiting human resources for Hygiene Services in accordance with best practice, current legislation and governmental guidelines.

All recruitment of staff at St Finbarr's Hospital is processed through the Human Resources Department of the Cork University Hospital Group in line with National Recruitment Policy and Standards. A full range of job descriptions and task specifications was observed. The hospital does not utilise contract-cleaning staff for the hygiene services. Staff records are maintained off site. Some staff files for local purposes were noted and some job descriptions have been changed following national and local evaluation. Recruitment processes are not evaluated.

CM 10.2 (C → C)

Human resources are assigned by the organisation based on changes in work capacity and volume, in accordance with accepted standards and legal requirements for Hygiene Services.

It was noted that any need for changes in this area are based on work capacity, and volumes identified in routine audits. These are discussed with the Hygiene Services Committee when standards are not met. Work practice changes have been implemented through the introduction of the principles of the National Cleaning Manual and through striving to meet the HIQA Hygiene Assessment Standards.

CM 10.3 (C → C)

The organisation ensures that all Hygiene Services staff, including contract staff, have the relevant and appropriate qualifications and training.

The recruitment process ensures that job descriptions are fit for the purpose and include requirements for appropriate qualifications and training. On-site orientation, induction and training ensure that there is a continuing training programme in place.

It is recommended that all hygiene staff receive further formal education opportunities such as British Institute of Cleaning Science, SKILLS, Hazard Analysis Critical Control Point (HACCP) and the management of waste.

CM 10.4 (N/A → D)

There is evidence that the contractors manage contract staff effectively.

There was no evidence that this occurs. During the assessment, concerns were raised in relation to the external catering contract for staff canteen requirements. There was evidence that this area did not meet hygiene standards. This issue was brought to the attention of the senior hospital management. Immediate remedial action was undertaken and a Quality Improvement Plan instigated.
It is recommended documented processes to ensure that contractors manage contract staff be developed.

ENHANCING STAFF PERFORMANCE

*Core Criterion

CM 11.1 (C → C)

There is a designated orientation / induction programme for all staff which includes education regarding hygiene.

All formal recruitment processes are carried out by the Human Resources Department. Formal induction packs and records of attendance at induction programmes were observed, as was a staff handbook. Mandatory training is provided for hand hygiene, colour coding, manual handling and limited training for waste management. Continuous training is provided for new work or equipment/product changes.

CM 11.2 (C → C)

Ongoing education, training and continuous professional development is implemented by the organisation for the Hygiene Services team in accordance with its Human Resource plan.

There is a documented process, through the Human Resources policies, procedures and guidelines and through the agreed partnership approach to the SKILLS project,

to ensure continuous professional development for staff. This is available to all grades. Appropriate training, including internal infection control, manual handling, fire safety training courses and external FETAC and BICS courses, is available to hygiene services. Health and safety training, management of risk hazard analysis and cleaning and disinfection education is available. The organisation is recommended to evaluate the relevance of education for all staff.

CM 11.4 (C → C)

Performance of all Hygiene Services staff, including contract /agency staff is evaluated and documented by the organisation or their employer.

There is a system of staff appraisal in place, as outlined in the Human Resources procedure manual. These procedures allow monthly reviews on commencement of duty for three months and three-monthly thereafter for the first year. A limited internal evaluation is carried out on the completed appraisals. All records in relation to staff are kept on the employee's personal file.

PROVIDING A HEALTHY WORK ENVIRONMENT FOR STAFF

CM 12.1 (C → C)

An occupational health service is available to all staff

The Occupational Health Service is located at the Cork University Hospital. This is a regional service for all acute Cork hospitals. Details of staff vaccination programmes are held by the regional Occupational Health Service. There was evidence of a process that ensures staff is up-to-date with required vaccinations through direct notification. The department supports the recruitment process for the hospital in relation to occupational health pre-employment requirements.

There was no evidence of any evaluation of the service. Neither was there of resultant actions, feedback or the Quality Improvement Plan. It is recommended that the hospital formalise the liaison with the department and instigate procedures to ensure that the hospital fulfils its requirements.

CM 12.2 (N/A → C)

Hygiene Services staff satisfaction, occupational health and well-being is monitored by the organisation on an ongoing basis

The management of household (attendant) staff monitors attendances/absenteeism, needle-stick injuries, falls, and complaints and addresses them using the People in Management Framework. There is evidence of on-going consultation with the regional CUH partnership group in relation to introduction of a back-to-work interview. No staff satisfaction survey was observed. One is recommended. There were no Key Performance Indicators available for the occupational health service. These are also recommended.

COLLECTING AND REPORTING DATA AND INFORMATION FOR HYGIENE SERVICES

CM 13.1 (D ↑ C)

The organisation has a process for collecting and providing access to quality Hygiene Services data and information that meets all legal and best practice requirements.

Access to best practice information and hygiene data is through a number of channels, internal and external audits and reports. Information is also collected through the various hospital committee systems such as ward managers. There are links with Cork University Hospital and Primary, Continuing and Community Care

(PCCC). Advice and input is forthcoming from the Infection Control Nurse, and Health and Safety Committee. Best practice national guidelines such as the Strategy for the control of Antimicrobial Resistance in Ireland (SARI), the National Cleaning Manual and legislation procedures, including management of waste. It is recommended that further linkages be developed with CUH or PCCC as appropriate.

CM 13.2 (C → C)

Data and information are reported by the organisation in a way that is timely, accurate, easily interpreted and based on the needs of the Hygiene Services.

Internal hygiene audits are conducted, reviewed, prioritised and resultant actions are put in place on a weekly basis, in line with resources. Infection control data such as MRSA rates are submitted to Cork University Hospital Infection Control Surveillance Team.

ASSESSING AND IMPROVING PERFORMANCE FOR HYGIENE SERVICES

CM 14.1 (C → C)

The Governing Body and/or its Executive Management Team foster and support a quality improvement culture throughout the organisation in relation to Hygiene Services.

The hospital management have supported and fostered a quality improvement culture. However, there is no Quality Officer or Quality Department. Management of hygiene quality is generated from the Senior Management Team, departmental management and the Hygiene Services Committee using the external and internal audit processes to improve standards. Some initiatives, such as the introduction of the National Cleaning Manual, British Institute of Cleaning Science (BICS) training for domestic supervisors, the introduction of colour coding, evaluation of re-cycling options, provision of upgraded main and ward kitchens, rollout of new sinks have all helped. Proposed initiatives are discussed with committee and department managers.

CM 14.2 (C → C)

The organisation regularly evaluates the efficacy of its Hygiene Services quality improvement system, makes improvements as appropriate, benchmarks the results and communicates relevant findings internally and to applicable organisations.

On-going audits and funding was made available to address priority issues. Examples include increased household supervision, purchase of steam cleaners and a new centralised kitchen. The hospital has benchmarked itself against national hygiene audits, internal audits and Environmental Health Officer reports. Evaluation processes have been improved by the Hygiene Services Committee.

3.0 Standards for Service Delivery

The following are the ratings for the Service Delivery standards, as validated by the Assessment team. The service delivery standards allow an organisation to assess and evaluate its activities in relation to Hygiene Services at a team level. The Service Delivery standards relate directly to operational day-to-day work and responsibility for these standards lies primarily with the Hygiene Services Team in conjunction with Ward/Departmental Managers and the Hygiene Services Committee. There are six Service Delivery standards, which focus on such areas as prevention and health promotion, implementing hygiene services and patients / clients rights. There are seven core criteria within these standards.

EVIDENCE BASED BEST PRACTICE AND NEW INTERVENTIONS IN HYGIENE SERVICES

SD 1.1 (C → C)

Best Practice guidelines are established, adopted, maintained and evaluated, by the team.

The National Cleaning Manual and the Infection Control Manual form the basis for hygiene standards. A colour coded system for cleaning was in place. The contractor's required the use of clear plastic bags for soiled linen and alginate bags for contaminated linen. The Domestic Supervisor had completed a British Institute of Cleaning Science training standard and was involved in induction and on–going training of staff. An evaluation should be carried out of the efficacy of the processes used to develop best practice guidelines and feedback, for continuous quality improvement.

SD 1.2 (C → C)

There is a process for assessing new Hygiene Services interventions and changes to existing ones before their routine use in line with national policies.

New developments introduced over the last two years included the introduction of hand gel, colour coding, acquisition of steam cleaning equipment and training in its use had yet to commence. Internal audits had commenced in the clinical areas. They should be extended to all patient/client service areas, including allied health services, and all hygiene related departments. A formal system of evaluation should be progressed with resultant action plans and continuous quality improvement evidenced.

PREVENTION AND HEALTH PROMOTION

SD 2.1 (C → C)

The team in association with the organisation and other services providers participates in and supports health promotion activities that educate the community regarding Hygiene.

Very limited evidence, other than the hand hygiene information was available in clinical areas. No evaluation of this was carried out. This is recommended.

INTEGRATING AND COORDINATING HYGIENE SERVICES

SD 3.1 (B ↓ C)

The Hygiene Service is provided by a multi- disciplinary team in cooperation with providers from other teams, programmes and organisations.

There should be an evaluation of the membership of the Hygiene Services Committee to ensure it reflects the full scope of the staff/departments involved in hygiene service delivery. Roles and responsibilities need to be identified. A Hygiene Services Team should be established to include the front line staff. Linkages and partnerships are mainly with Cork University Hospital through Elderly Services, Risk Management, the Quality Evaluation, Strategy and Policy Committee, Central Purchasing Services and Central Contracts Services.

IMPLEMENTING HYGIENE SERVICES

*Core Criterion

SD 4.1 (C ↑ B)

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

The provision of a hygiene service is restricted by the limitations of the physical environment in St. Oliver's and St. Clare's wards. Their upgrade of these areas is due to commence later this year. Greater attention to general cleaning is required and there should be sufficient signage at all hand hygiene areas. Ventilation needs to be addressed in these wards in any future ward upgrade. The issue of a designated smoking area needs to be addressed.

For further information see Appendix A

*Core Criterion

SD 4.2 (B ↑ A)

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

This occurs but some further attention to detail is recommended. A discussion, about the use of fans in the clinical areas, took place with the team and the lack of control over environmental temperatures was raised as a challenge in the absence of fan usage. A scheduled process needs to be developed for the cleaning of fans.

For further information see Appendix A

*Core Criterion

SD 4.3 (C → C)

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

Greater attention to detail required here. All equipment should be reviewed for circuit breakers, filter change practice, records etc. A ladder policy should be established which reflects current legislation.

For further information see Appendix A

*Core Criterion

SD 4.4 (C ↑ A)

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.

The main kitchen, which was opened last year, was built to a high standard of design and finish and was very well maintained. Al equipment was new, including the containers and trolley for the transfer of prepared food to ward areas. All catering staff was trained in Hazard Analysis and Critical Control Point (HACCP). However, some recently appointed operatives were not but had completed basic food safety training. The ward kitchens in St. Oliver's and St. Clare's had been upgraded in the recent past. Access was restricted to relevant staff but the coded lock, which was ordered, had yet to be fitted in St. Clare's Ward. The kitchen in the Day Hospital was not designated for patient/clients only but is only used for the preparation of beverages and the serving of soup and sandwiches. It was clean and well managed. Use of cotton tea towels should be reviewed. However the standard of cleanliness and abundance of the tea towels was very good.

For further information see Appendix A

*Core Criterion

SD 4.5 (C ↑ B)

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.

There is a secure waste compound and positive efforts are being made towards recycling. The site would benefit from a designated Waste Officer. Further review of the waste management system is required to identify mechanisms by which the manual handling of clinical waste can be reduced. Site-specific documented process for the segregation, transport storage and disposal of waste is required as is further staff training in the area of waste management.

For further information see Appendix A

*Core Criterion

SD 4.6 (C ↑ B)

The team ensures the Organisations linen supply and soft furnishings are managed and maintained.

Linen services are supplied by an external contractor and delivered directly to wards where there is a designated linen room. Linen was of a high standard. This is a recent development, which has been included in a hospital group contract as an interim measure. This service will be included fully in the documentation for the new contract due for renewal in the next few months. The use of cotton tea towels needs to be reviewed. A documented process for the management, handling and transportation of linen is required. A policy is required for the use of the on–site washing machine.

For further information see Appendix A

*Core Criterion

SD 4.7 (C ↑ B)

The team works with the Governing Body and/or its Executive Management team to manage hand hygiene effectively and in accordance with SARI guidelines.

There was extensive compliance with the staff uniform/jewellery policy. The replacement of wash-hand basins, which is part of the imminent upgrade of St. Oliver's and St. Clare's wards is recommended. Hand hygiene signage needs to be reviewed to ensure full compliance with best practice.

For further information see Appendix A

SD 4.8 (B ↓ C)

The team ensures all reasonable steps to keep patients/clients safe from accidents, injuries or adverse events.

An in–house risk reporting and investigation system and Health and Safety Committee are in place. There is a central computerised risk register for the Cork University Hospital Group. No regular feedback to this hospital was in place as yet from the central record and this is anticipated and recommended. There were no adverse hygiene incidents in the last two years.

SD 4.9 (C → C)

Patients/Clients and families are encouraged to participate in improving Hygiene Services and providing a hygienic environment.

There are notices on hand hygiene and hand gel and information leaflets available for patient/clients and the public. The National Visiting Policy is being adapted to local needs. "Your Services Your Say" was implemented but there was limited feedback to date from this. Patient/clients interviewed expressed satisfaction with the hygiene standards. There was no formal patient/client family satisfaction survey undertaken. This is recommended.

PATIENT'S/CLIENT'S RIGHTS

SD 5.1 (C → C)

Professional and organisational guidelines regarding the rights of patients/clients and families are respected by the team.

There are facilities in place for isolation of patient/clients where necessary for infection control purposes. A relatives' room is available and facilities are provided for patient/clients to conduct private business away from their ward area. Patient/client information leaflets are available. There was a range of patient/client assessment tools in use. The infection control manual was last reviewed in 2004. Systematic review and complaints processes were in place, with appropriate follow up mechanisms. The Hospital Manager is the Complaints Officer and the complaints procedure is linked to Cork University Hospital's system. Regular feedback and trending is anticipated and recommended.

SD 5.2 (C → C)

Patients/Clients, families, visitors and all users of the service are provided with relevant information regarding Hygiene Services.

This takes place and is evaluated. There were few complaints and none of a serious nature.

SD 5.3 (C → C)

Patient/Client complaints in relation to Hygiene Services are managed in line with organisational policy.

The Hygiene Services Committee should include a review of complaints in their terms of reference and ensure evaluation, resultant actions and benchmarking against own standards.

ASSESSING AND IMPROVING PERFORMANCE

SD 6.1 (D ↑ C)

Patient/Clients, families and other external partners are involved by the Hygiene Services team when evaluating its service.

There is no formal process in place apart from, "Your Hospital Your Say". The Hospital Manager followed up all complaints with the relevant department. There is no patient/client or public representation on the committee.
This should be formalised and adapted to meet the needs of the hospital.

SD 6.2 (C → C)

The Hygiene Services team regularly monitors, evaluates and benchmarks the quality of its Hygiene Services and outcomes and uses this information to make improvements.

The hospital has participated in the National Hygiene Audits of 2005 and 2006 and has commenced internal hygiene audits during the past two years. These should be extended to all areas. Environmental Health Office inspections and reports are also available. Results of a recent inspection were, at the time of assessment, still awaited. Closure of the quality loop in relation to these is recommended. Hazard Analysis and Critical Control Point (HACCP) records are maintained and cleaning checklists are completed. The committee should produce an annual report and identify Key Performance Indicators for each aspect of hygiene services.

SD 6.3 (B ↓ C)

The multi-disciplinary team, in consultation with patients/clients, families, staff and service users, produce an Annual Report.

A bi-annual report, which heretofore was part of the Cork University Hospital Group report, is compiled. This did not have a hygiene specific section. The Hospital, through its Hygiene Services Committee should develop a structure reflecting Key Performance Indicators for all aspects of hygiene services and produce and circulate an annual report.

4.0 Appendix A

The following are the scores received for the Service Delivery core criteria compliance requirements. The organisation must provide evidence of exceptional compliance (greater than 85%) to achieve an 'A' rating. All 'core criteria' must have achieved an 'A' rating to receive a score of 'very good' and be acknowledged with an award.

4.1 Service Delivery Core Criterion

Compliance Heading: 4. 1 .1 Clean Environment

(1) The environment is tidy, well-maintained, free of rust, blood or body substances, dust, dirt, debris and spillages.
No - There were numerous examples of dust and debris noted.

(2) All high and low surfaces are free from dust, cobwebs and flaking paint.
No - Dust, cobwebs and flaking paint in many areas.

(3) Wall and floor tiles and paint should be in a good state of repair.
No - Repairs needed to floor tiles in some areas.

(4) Floors including edges, corners, under and behind beds are free of dust and grit.
No - Dust was evident in corners in many of the clinical areas.

(6) Free from offensive odours and adequately ventilated.
No - Bathroom ventilation needs attention.

(8) All entrances and exits and component parts should be clean and well maintained.
Yes - In the majority, however, Ambulance entrance to St Oliver's Ward should be upgraded and hand hygiene facilities included.

(9) Where present, main entrance matting and mat well should be clean and in good repair.
Yes - This was observed to be compliant.

(12) Internal and external stairs, steps and lifts must be clean and well-maintained.
Yes - All ground floor facilities compliant.

(14) Waste bins should be clean, in good repair and covered.
Yes - All internal bins clean. Some external bins needed internal cleaning.

(15) Where present a designated smoking area must comply with the national legislation on tobacco control and local organisational policies, a cigarette bin must be available and the floor area should be free of cigarette ends, matches etc.
No - Designated smoking areas not in place. This should be addressed in accordance with the tobacco regulations.

Compliance Heading: 4. 1 .2 The following building components should be clean:

(17) Switches, sockets and data points.
Yes - .

(18) Walls, including skirting boards.
Yes - However, some needed attention.

(20) Doors
Yes - Some damaged door edges noted.

(21) Internal and External Glass.
No - Some internal glass needed attention

(23) Radiators and Heaters
Yes - These were observed to be clean.

(25) Floors (including hard, soft and carpets).
No - Corners in general were not clean.

Compliance Heading: 4. 1 .3 Organisational Buildings and Facilities (note: while list is not exhaustive, the following compliance is required):

(30) Fixtures: Fixtures (i.e. a piece of equipment or furniture which is fixed in position) should be clean. This includes all electrical fixtures e.g. all light fittings and pest control devices.
No - The over bed lights were not clean and were difficult to clean and should be replaced.

(32) Shelves, benchtops, cupboards are clean inside and out and free of dust and spillage.
Yes - Some shelves were dusty.

Compliance Heading: 4. 1 .4 All fittings & furnishings should be clean; this includes but is not limited to:

(33) Chairs
Yes - Cloth covered chairs in physiotherapy corridor should be replaced with washable covered material.

(35) Patient couches and trolleys
No - Physiotherapy and Occupational Therapy Department trolleys need attention.

(36) Lockers, Wardrobes and Drawers
Yes - These were observed to be clean.

(40) Curtains and Blinds
No - Curtains and blinds in many areas were in poor state of repair. Some roller blinds requiring attention observed and removal recommended.

Compliance Heading: 4. 1 .5 Sanitary Accommodation

(44) Hand hygiene facilities are available including soap and paper towels.
Yes - However, signage should be provided at all hand wash sinks.

(47) Bathrooms / Washrooms are clean and communal items are stored e.g. talc or creams.
No - Communal items observed in bathrooms.

(48) Floors including edges and corners are free of dust and grit.
No - Dust and grit was noted in corners of clinical areas.

Compliance Heading: 4. 1 .6 All sanitary fixtures and appliances should be clean and well-maintained. This includes but is not limited to:

(53) Bidets and Slop Hoppers
Yes - No bidets in use.

(58) Sluice rooms should be free from clutter and hand washing facilities should be available.
No - These areas were multipurpose with no hand wash facilities.

(59) Where present shower curtains should be clean and in good repair with a process for laundering and replacement.
Yes - No shower curtains observed.

Compliance Heading: 4. 2 .2 Direct patient contact equipment includes

(66) Medical equipment e.g. intravenous infusion pumps, drip stands and pulse oximeters, suction apparatus and tubing, cardiac monitors, blood pressure cuffs, blood gas machines.
Yes - However drip stands in a number of areas require attention.

(67) Bedside oxygen and suction connectors.
Yes - Compliance observed.

(68) Patient fans which are not recommended in clinical areas.
No - Fans in use in a number of clinical areas.

Compliance Heading: 4. 2 .3 Close patient contact equipment includes:

(79) Flower vases where present should be clean with water changed minimum daily. Wilted flowers should be removed and disposed of accordingly. Note: flowers not recommended in high risk areas.
No - Wilted flowers observed. Documented policy needs to be developed.

(272) Splashes of water or hand-wash gel should not be present on the wall, floor, bed or furniture, splash backs should be provided.
Yes - Compliance observed.

Compliance Heading: 4. 3 .1 Cleaning Equipment & Products (note: while list is not exhaustive, the following compliance is required):

(81) All cleaning equipment should be cleaned daily.
No - Not observed to be clean.

(82) Vacuum filters must be changed frequently in accordance with manufacturer's recommendations - evidence available of this.
No - No information available on change schedules.

(87) All cleaning equipment should be approved by the Hygiene Services Committee and ensure sufficient supply.
No - It is recommended this issue be taken on board by the committee in future.

(88) All cleaning equipment should be left clean, dry and tidy in the storage area after use.
No - A number of cleaning trolleys need attention.

(90) Storage facilities for Cleaning Equipment should be provided in each work area with adequate ventilation, a hot and cold water supply and hand-wash facilities.
No - Cleaning equipment stored in sluice room.

(94) Health and Safety policies should be in place for the use of ladders/steps when cleaning.
No - Ladders observed, no policy in place.

(95) When using electrical cleaning equipment, a circuit breaker should be used if appropriate and the equipment should be plugged in while switched off using dry hands.
No - All equipment should be systematically reviewed to establish need for circuit breakers.

Compliance Heading: 4. 4 .1 Kitchens, ward/department kitchens & kitchen fittings/appliances (note: while list is not exhaustive, the following compliance is required):

(214) The person in charge of catering shall develop, implement and maintain a permanent system based on the seven principles of HACCP. A standard HACCP Plan should be fully completed.
Yes - Catering Officer/chefs fully trained. Some recently recruited operatives not so.

Compliance Heading: 4. 4 .2 Facilities

(217) Access to the main kitchen and ward kitchens should be restricted to designated personnel i.e. food workers.
Yes - Restriction in place. However, padded lock awaited for one ward kitchen. No entry notice in place.

(222) A wash hand basin should be provided at the ward kitchen, in addition to a sink, along with a liquid soap dispenser and hygienic hand drying (e.g. paper towels).
Yes - No hand-wash sink available in Day Hospital kitchen. One is recommended.

(223) Separate toilets for food workers should be provided.
Yes - These were observed.

Compliance Heading: 4. 4 .3 Waste Management

(232) Waste storage containers shall be smooth, durable, easy to clean and disinfect, well maintained and closable.
Yes - These were observed.

Compliance Heading: 4. 4 .5 Management of Chill Chain in a Hospital

(240) A Hospital using a cook-chill system should comply with Guidance Note No. 15 Cook-Chill Systems in the Food Service Sector (Food Safety Authority of Ireland) The temperatures of fridges, freezers, cold rooms and chill cabinets shall be capable of maintaining the temperature of foodstuffs
Yes - Freshly cooked foods only.

(241) Ice cream display units can operate at -12°C as long as it can be demonstrated that the product has been held at this temperature for less than 7 days.
Yes - No ice cream display units in use. Ice cream stored correctly

Compliance Heading: 4. 4 .7 Food Processing

(246) The thawing of food shall be carried out under appropriate conditions such as in a thawing unit, a fridge or a microwave oven with thawing cycle.
Yes - Thawing carried out in fridge.

Compliance Heading: 4. 4 .8 Food Cooking

(247) All foods shall be cooked to a temperature to ensure that the products are safe for consumption. The core temperature of the food shall be assessed at he thickest point of the food and should be compliant with I.S. 340:2006
Yes - This was in place.

Compliance Heading: 4. 4 .9 Food Cooling

(248) Cooling Times for Cooked Food should comply with I.S. 340:2006 requirements.
Yes - Food cooling system in place.

Compliance Heading: 4. 4 .10 Plant & Equipment

(249) Machines should dispense ice but where ice-scoops are used, they should be stored separately from the ice-making machine and there should be a process for the appropriate decontamination of the ice scoops. The making of ice cubes other than in ice machines is prohibited.
Yes - None observed in use.

(251) All temperature probes shall be calibrated annually. Calibration may be carried out internally or externally (instrumentation firm). Documentation should be retained of the procedures used to control, calibrate and maintain inspection, measuring and test equipment used to demonstrate compliance with the HACCP Plan.
Yes - Replaced more frequently than once a year.

Compliance Heading: 4. 5 .1 Waste including hazardous waste:

(141) Documented procedures for the segregation, handling, transportation and storage of waste.
No - In-house documented waste management procedure required to cover segregation, handling, transportation and storage.

(145) A record is kept of tags used for each ward/department for at least 12 months.
No - Records should reflect which wards, departments tags issued to.

(146) A tracking system should be in place to trace all hazardous waste from generation to disposal and therefore an audit trail is available to trace waste to final disposal.
No - It is recommended that one be conducted.

(149) Inventory of Safety Data Sheets (SDS) is in place.
No - Inventory required.

(152) When required by the local authority the organization must possess a discharge to drain license.
Yes - Not requested by local authority.

Compliance Heading: 4. 5 .3 Segregation

(156) Healthcare risk waste must be segregated from healthcare non risk waste.
Yes - Two clinical waste bags found in general waste skip in waste compound and follow-up by management undertaken. Segregation should be addressed.

(256) Mattress bags are available and are used for contaminated mattresses ready for disposal; mattresses are disinfected.
No - Mattress bags should be sourced.

Compliance Heading: 4. 5 .4 Transport

(163) Documented processes for the transportation of waste through the hospital which minimizes manual handling of waste (and ensures that segregation of healthcare risk waste from non-risk waste is maintained) are in place.
No - Review system to reduce manual handling of clinical waste by staff.

(164) A consignment note (C1 form) must be completed for each shipment of hazardous waste and copies of these forms must be kept for at least 12 months. This should be linked with certificates of destruction and TFS where applicable.
Yes - However, the method should be revised.

(165) There is a designated person trained as a Dangerous Good Safety Advisor (DGSA) or the services of a DGSA are available to the hospital.
No - Investigate obtaining DGSA services for the site.

(166) Drivers of vehicles transporting hazardous waste must be trained in accordance with the ADR Regulations.
No - ADR Regulations need to be implemented.

Compliance Heading: 4. 5 .6 Training

(259) There is a trained and designated waste officer.
No - There needs to be a designated in-house waste officer.

Compliance Heading: 4. 6 .1 Management of Linen and Soft Furnishings (note: while list is not exhaustive, the following compliance is required):

(172) Documented processes for the management, maintenance and safe handling of linen and soft furnishings throughout the organisation.
No - Need to be developed including the in-house laundry room procedures.

(173) Documented processes for the use of in-house and local laundry facilities.
No - None observed.

(262) Linen is segregated into categories and in appropriate colour coded bags (i.e. clean/unused linen, dirty/used linen, dirty/contaminated linen).
Yes - However clear plastic bags were used for soiled linen instead of alginate bags within clear plastic bags for contaminated linen, in accordance with contractor regulations.

(264) Bags must not be stored in corridors prior to disposal.
Yes - None observed.

(267) Documented process for the transportation of linen.
No - Documented processes should be developed.

(268) Ward based washing machines are used only with the agreement of the Hygiene Services Committee.
Yes - No ward based washing machines in use.

(269) A washing machine if used is situated in an appropriate designated area and a clear policy/written guidance is in place regarding its use e.g. water temperature etc.
No - A washing machine and dryer is situated in the laundry room for some items not possible to include in the linen contract. A policy should be developed.

(271) Hand washing facilities should be available in the laundry room.
Yes - Hand-wash sink present. Splash back, hand gel and hand-wash poster should be provided.

Compliance Heading: 4. 7 .1 Management of hand hygiene (note: while list is not exhaustive, the following compliance is required):

(189) Clinical hand wash sinks are required in all areas where clinical activities are performed. They should be centrally located and free from obstruction.
No - None in sluice/treatment rooms.

(190) All sinks should be fitted with washable splash backs with all joints completely sealed.
No - A number were not compliant.

(192) Taps should be hands free and should be mixer taps to allow temperature regulation.
No - Most observed were non -compliant.

(198) Hand hygiene posters and information leaflets should be available and displayed throughout the organization.
No - Attention needs to be given to ensuring full compliance. Many sinks observed without posters.

(199) Alcohol based hand rub should be available at the bed side of each patient in Critical care units and in each patient room/clinical room.
Yes - No critical care areas in this service.

(204) Hand wash sinks conform to HBN 95. They should not have plugs, overflows and the water jet must not flow directly into the plughole.
No - Majority not compliant.

5.0 Appendix B

5.1 Ratings Summary

		Self Assessor Team		Assessor Team
	FREQ	%	FREQ	%
A	0	00.00	2	03.57
B	5	08.93	5	08.93
C	44	78.57	48	85.71
D	5	08.93	1	01.79
E	0	00.00	0	00.00
N/A	2	03.57	0	00.00

5.2 Ratings Details

Criteria	Self Assessment	Assessor	Difference
CM 1.1	C	C	→
CM 1.2	B	C	↓
CM 2.1	C	C	→
CM 3.1	C	C	→
CM 4.1	C	C	→
CM 4.2	C	C	→
CM 4.3	C	C	→
CM 4.4	C	C	→
CM 4.5	C	C	→
CM 5.1	C	C	→
CM 5.2	C	C	→
CM 6.1	C	C	→
CM 6.2	C	C	→
CM 7.1	C	C	→
CM 7.2	C	C	→
CM 8.1	D	C	↑
CM 8.2	C	C	→
CM 9.1	D	C	↑
CM 9.2	C	C	→
CM 9.3	C	B	↑
CM 9.4	D	C	↑
CM 10.1	C	C	→
CM 10.2	C	C	→
CM 10.3	C	C	→
CM 10.4	N/A	D	↑
CM 10.5	C	C	→
CM 11.1	C	C	→
CM 11.2	C	C	→
CM 11.3	C	C	→
CM 11.4	C	C	→

CM 12.1	C	C	→
CM 12.2	N/A	C	↑
CM 13.1	D	C	↑
CM 13.2	C	C	→
CM 13.3	C	C	→
CM 14.1	C	C	→
CM 14.2	C	C	→
SD 1.1	C	C	→
SD 1.2	C	C	→
SD 2.1	C	C	→
SD 3.1	B	C	↓
SD 4.1	C	B	↑
SD 4.2	B	A	↑
SD 4.3	C	C	→
SD 4.4	C	A	↑
SD 4.5	C	B	↑
SD 4.6	C	B	↑
SD 4.7	C	B	↑
SD 4.8	B	C	↓
SD 4.9	C	C	→
SD 5.1	C	C	→
SD 5.2	C	C	→
SD 5.3	C	C	→
SD 6.1	D	C	↑
SD 6.2	C	C	→
SD 6.3	B	C	↓