Centre for Health Information
Newfoundland & Labrador

MIS Standards, Workload Measurement and Statistical Data Collection

Reference Guide for Food Services Administration

May 2012

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1 INTRODUCTION

1.1 Purpose

The purpose of this reference guide is to educate readers regarding the Management Information Systems (MIS) Standards and their application to the discipline of food services in the Newfoundland and Labrador Health Care System.

1.2 What are the MIS Standards?

The Standards for Management Information Systems in Canadian Health Service Organizations*, the MIS Standards*, are published by the Canadian Institute for Health Information (CIHI). The MIS Standards are the national data standard for the collection and reporting of financial and statistical information from health service organizations. Originally developed for hospitals, the MIS Standards have been expanded over the years to include all types and sizes of health organizations. The MIS Standards specify:

- what data to collect;
- how to group and process data; and
- how to analyze and use the data to support management functions such as evaluation, control, budgeting, planning and quality initiatives (turning data into information).

Core components of the MIS Standards are:

- chart of accounts;
- accounting principles and procedures;
- workload measurement systems;
- indicators;
- management applications; and
- glossary of terms.

The primary goal of the MIS Standards is to provide standardized, basic operational management information to front line managers as well as administrators throughout the health system. Implementation of the MIS Standards enables organizations to have comparable financial information and related statistics (such as workload and patient activity) for the many clinical services they provide. This data can then be used to report calculation of key indicators, providing a useful tool to measure and monitor performance. Some examples are:

- accountability reporting by managers for resource use;
- development of budgets based on meaningful workload and activity projections;
- more precise resource allocation; and
- more informed management decisions.

The MIS Standards were adopted by the Newfoundland and Labrador Department of Health and Community Services in 1992. Provincial reporting requirements were developed based on the national reporting requirements with provincial customization as required to meet local information needs.

A national MIS Technical Working Group provides CIHI with expert technical advice on the development, maintenance and effective implementation of the MIS Standards across the continuum of health service delivery. The working group is composed of provincial and territorial MIS Coordinators, with additional members from the field added at CIHI's discretion.

1.3 What is the Role of the Provincial MIS Committees?

The Provincial MIS Committees are discipline-specific groups that:

- make recommendations regarding implementation of the components of the MIS Standards applicable to their discipline;
- promote the use of the workload measurement systems by their discipline; and
- provide a vital link between the professions, Department of Health and Community Services (DHCS) and the Data Quality and Standards Division of the Newfoundland and Labrador Centre for Health Information (the Centre).

Currently there are 18 provincial MIS committees for the following disciplines:

- Data Quality and Reporting *(Financial & Statistical Reporting);*
- Audiology;
- Clinical Laboratory;
- Electrodiagnostic, Cardiac and Vascular Laboratories;
- Food Services Administration;
- Health Information Services ;
- Medical Imaging;
- Nursing;
- Nutrition Services;
- Occupational Therapy;
- Pastoral/Spiritual Care;
- Pharmacy;
- Physiotherapy;
- Psychology;
- Respiratory Therapy;
- Social Work;
- Speech-Language Pathology; and
- Therapeutic Recreation.

The Provincial Data Quality and Reporting MIS Committee includes finance representatives from all Regional Health Authorities, the DHCS and the Centre. It has overarching responsibility for issues related to the quantity and quality of the data collected provincially.

The Provincial Food Services Administration MIS Committee was formed in 1997 to facilitate implementation of the MIS Standards as they apply to the food services administrators and the food services administration support staff in the province of Newfoundland and Labrador. The ongoing work of the Committee includes:

- provision of education sessions on workload management and statistical data collection;
- maintenance of the discipline specific reference guide;
- development and administration of audit tools;
- promotion of data quality on a provincial basis;
- development of provincial performance indicators;
- provision of feedback on changes to the MIS Standards to CIHI through the provincial MIS Standards Manager; and
- facilitation of revisions to the MIS Standards pertinent to food services.

Information about the Terms of Reference and membership for all MIS committees can be obtained from the MIS Standards staff at the Centre, also see Section15 Resources.

1.4 What is the Role of the Centre for Health Information?

The Centre for Health Information was established to provide quality information to health professionals, the public and health system decision makers. Through collaboration with the health system the Centre supports: the development of standards; maintains key provincial health databases; prepares and distributes health reports; and supports and conducts applied health research and evaluations. The Centre's mandate also includes the development of a confidential and secure Electronic Health Record for the Province.

The MIS Standards are the responsibility of the Data Quality and Standards Division within the Centre. This division is responsible for developing and promoting the use of data standards for financial, statistical, social, demographic and clinical data collection in the health sector. It is responsible for ensuring that this data is uniform in definition, measurement, collection and interpretation. Many of these standards are developed with or mirror national standards; which ensures comparability and consistency of data across the health system.

2 KEY CONCEPTS

2.1 Code Structure and Matching Principle

The MIS Chart of Accounts general coding structure consists of several various code blocks (see Figure 1).

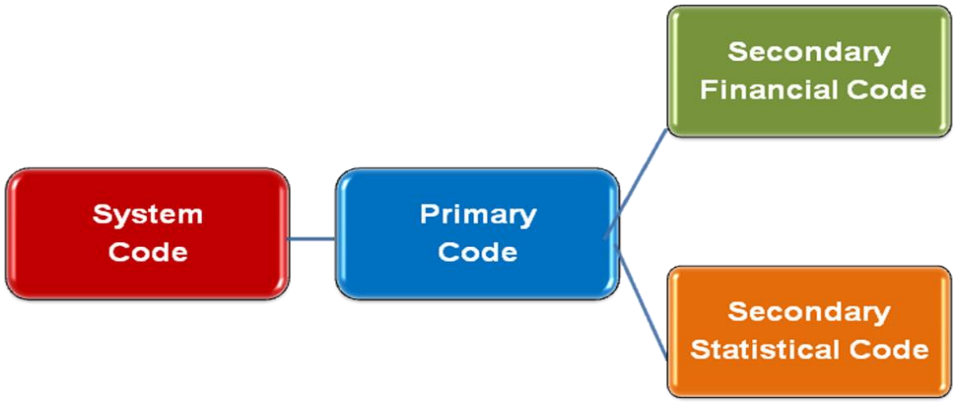

Figure 1

Using these code blocks, data can be recorded in a health service organization's financial and statistical general ledgers in a structured manner. The number of blocks used depends on the account being defined.

The first code in all account numbers is the **system code** block. It is assigned by the information systems or finance department when the Chart of Accounts is established for the health service/reporting organization and represents the highest level of data aggregation. Organizations use this code block to numerically identify a facility, site or program within the Regional Health Authority.

The **primary code** refers to a numerical name for a functional centre or accounting centre. Functional centres in the diagnostic and therapeutic functional centre framework section are discipline specific. See section 3 for further detail.

The **secondary codes** provide for the recording of either financial or statistical information and identify specific types of information about the functional centre. See sections 4 and 5 for further detail.

The creation of primary and secondary accounts should be discussed with the individual responsible for MIS reporting within an organization to ensure that accounts correctly reflect the activity that occurs and that the secondary accounts are correctly linked with the primary account or functional centre. The person responsible for coordinating MIS activities in an organization can provide additional information on the accounts used for a particular service.

The **matching principle** in accounting associates both revenues and expenses to a defined time period. The MIS Standards expand this matching principle to the reporting of statistics within the same period as the associated revenues and expenses to enable the calculation of accurate cost indicators. Within the MIS framework there are three levels of data collection and reporting:

- The **functional centre direct cost reporting** level builds on the functional centre framework, linking revenues, expenses, statistics and indicators to provide a comprehensive picture of a functional centre's resource utilization, activity and productivity. Functional centres in the diagnostic and therapeutic functional centre framework section are discipline specific.

- The **functional centre full cost reporting** level builds upon the functional centre direct cost reporting level by including the indirect costs associated with each functional centre.

- The **service recipient reporting** level changes the focus from the functional centre to the service recipient and is often referred to as a "case costing." All financial and statistical data is linked to a specific person who receives services. This provides a comprehensive picture of how medical, nursing, therapeutic and support services are utilized in the treatment of various patient, client or groups. It can demonstrate the impact of practice patterns, programs, services and case mix groups on functional centres, service outcomes and the health service organization as a whole.

Functional centre direct cost reporting is the required level for reporting information to the Department of Health and Community Services. This means that all financial and statistical data are linked to defined functional centres and are reported in the functional centre in which the activity took place. While organizations may choose to collect information at the levels of the full cost or service recipient reporting, they will still be required to report to the Department of Health and Community Services at the functional centre level to ensure comparative data is available; however, they will have the advantage of enhanced information for internal decision making.

2.2 Broad Occupational Groups

The MIS Standards require all staff be assigned to one (or more) of three broad occupational groups. By doing so, the accuracy of productivity analysis is improved and the degree of overhead support associated with the service is identified.

Management and Operational Support Personnel (MOS)

Management and operational support are the personnel, including purchased consultant services, whose primary function is the management or support of the operation of the functional centre, although at times they may carry out unit-producing activities. This group includes:

- directors;
- managers;
- supervisors;

- administrative support staff;
- clerical support staff, and
- medical service aids, etc.

If the manager generates workload statistics, the worked hours related to this activity must be recorded as unit-producing, not management and operational support. Failure to link workload with unit-producing worked hours will skew performance indicators.

Unit-Producing Personnel (UPP)

Unit-producing personnel are those personnel whose primary function is to carry out activities that directly contribute to the fulfilment of the service mandate.

Examples include:

- registered nurses;
- licensed practical nurses;
- laboratory technicians;
- accounts payable clerks;
- pharmacists;
- therapeutic professionals (e.g. recreation specialists, physiotherapists, psychologists, etc.); and
- therapeutic assistants (e.g. social work assistants, occupational therapy support workers, etc.).

These personnel generate workload units. It is recognized that UPP staff may, at times, perform activities that are not unit-producing.

Medical Personnel (MP)

Medical personnel are physicians who are compensated for their professional services either on a fee-for-service or salary basis, including interns and residents.

Examples include:

- pathologists;
- psychiatrists;
- cardiologists;
- medical interns;
- medical students; and
- medical residents

Note: The designation of a broad group category is based on function; job category and union category should not be considered. Job category is not appropriate because one job category in an institution can be management and operational support in one functional centre, yet the same job category can be unit-producing in another functional centre (e.g. clerical staff in most clinical departments are MOS but in admitting departments they are UPP). Union category does not apply as therapists performing the same job are union in some organizations and non-union in others.

2.3 Categorization of Earned Hours

Earned hours statistics measure the use of labour in fulfilling the mandate of the service. These hours should be recorded in the broad categories of workers as outlined in the previous section. The cost of a worked hour may vary from one period to another and from one shift to another. Overtime and standby compensation expenses are attached to the actual hours that are worked (e.g. an hour of overtime is recorded as only one earned hour but the compensation may be at time and half).

Earned Hours = Worked Hours + Benefit Hours + Purchased Service Hours

Figure 2

Worked Hours

Worked hours are those hours that are spent carrying out the mandate of the service. Staff members are physically present and available to provide service. Worked hours include:

- regular worked hours, including paid coffee breaks;
- worked statutory holidays;
- relief staff hours, such as vacation relief and sick relief;
- overtime;
- call back hours paid and banked[1]; and
- attendance at on-site committee meetings and in-service education[2] (non-service recipient workload).

[1] Call back hours are a component of worked hours, recorded as the actual hours worked, rather than the minimum number of hours paid. Standby hours are not included in the count of worked hours but the associated expenses (compensation) are a component of worked salaries.

[2] Includes education sessions of less than ½ day; sessions greater than ½ day are considered benefit hours.

Costs are intended to link with activities and workload and therefore banked hours should be recorded in the payroll system during the period they are earned and not when they are taken.

Benefit Hours

Benefit hours are those hours when staff members are not present but receive pay. Benefit hours include:

- statutory holidays and vacation;
- sick and bereavement leave;
- workers compensation leave;

- attendance at facility orientation, formal education and training sessions (educational leave);
- union leave with pay; and
- any other paid leave of absence.

Purchased Service Hours

Purchased service hours are the hours spent carrying out the mandate of the service by personnel hired from an external agency. They have no benefit hour component. Purchased service hours are treated as worked hours. When contracting for external services, the costs related to management and support compensation, unit-producing compensation and supply costs should be differentiated within the contract.

Notables

Education hours – Staff time spent in education can fall into both worked and benefit categories. The MIS Standards describe education recorded as benefit hours as formal planned events for self-development and education recorded as worked hours as informal, short duration in-service sessions. When education occurs during worked hours, non-service recipient workload is reported.

Hours spent in education sessions of greater than ½ day duration are considered to be benefit hours (education leave); time spent in sessions of less than ½ day are considered to be worked hours (non-service recipient workload). This will provide comparable information for performance indicators provincially.

Unpaid worked hours – Only paid hours can be recorded as worked hours. If staff work additional hours and record workload for that time, the comparison of worked hours to workload could demonstrate productivity greater than 100%. Submission of unpaid worked time as worked hours will have a negative effect, as performance indicators will not provide an accurate picture of the real situation. Staff working unpaid hours should record this information for internal purposes. Worked hours should be generated from the payroll system to ensure accuracy.

Volunteers – Work performed by volunteers cannot be recorded as part of the functional centres UPP workload. Sometimes this is work that would not be performed by the facility if staff had to be paid and sometimes this is necessary for the provision of services. The number of volunteer hours should be recorded and reported internally in order to gain an understanding of the contribution of volunteers to the organization. Details of the type of work will be helpful in determining the role of the volunteer in reducing costs or enhancing the quality of the service provided.

2.4 Categories of Service Recipient

A service recipient is the consumer of service activities of one or more functional centres of the health service organization. Service recipients include individuals (e.g. inpatients, residents, clients), their significant others and others as defined by the health service organization.

Significant others are individuals who are acting on behalf or in the interest of, the service recipient such as parent, spouse/partner, child, legal guardian or substitute decision-maker. Excluded from this definition are professionals such as teachers, lawyers or other health care professionals.

The MIS Standards recognize and define eight categories of service recipients. They are detailed below:

Inpatient

An individual who has been officially accepted by a hospital for the purpose of receiving one or more health services; who has been assigned a bed, bassinet or incubator; and whose person identifiable data is recorded in the registration or information system of the organization and to whom a unique identifier is assigned to record and track services. This category includes: individuals receiving acute, physical rehabilitation: mental health and addiction services in a hospital setting: and those admitted to emergency while awaiting a bed on a nursing inpatient unit.

Note: Also includes services provided by a contracted out third party provider that provides inpatient services typically provided by a hospital.

This category excludes hospital clients receiving services of a specialty day/night care or specialty clinic nature on a nursing inpatient unit, as well as residents receiving services on a residential care unit, community hospice unit, mental health residential care unit, addiction services residential care unit and stillbirths.

Client Hospital

An individual who has been officially accepted by a hospital and receives one or more health services without being admitted as an inpatient; whose person identifiable data is recorded in the registration or information system of the Regional Health Authority and to whom a unique identifier is assigned to record and track services. Examples include individuals who receive hospital-based emergency day surgery, specialty day/night care, specialty clinic, outreach, mental health, rehabilitation and independent diagnostic and therapeutic services (provincially defined).

Client Community

An individual who has been officially accepted by a Regional Health Authority to receive one or more health services (other than home care), without being admitted as a resident or inpatient; and, whose person identifiable data is recorded in the registration or information system of the Regional Health Authority and to whom a unique identifier is assigned to record and track services. Examples include individuals receiving community-based mental health and/or addictions counselling, public health nursing, health promotion and wellness services, etc. (provincially defined).

Client Home Care

An individual who has been officially accepted by a Regional Health Authority to receive one or more home health or home support services in his/her place of residence (e.g. private residence, assisted living residence), at an alternative health delivery location (e.g. community health office) or at a location that meets the client's needs (e.g. school, public place); and whose person identifiable data is recorded in the registration or information system of the Regional Health Authority and to whom a unique identifier is

assigned to record and track services. Examples include individuals receiving home health services such as the treatment of acute conditions, maintenance of chronic health conditions, rehabilitation to improve functional abilities, etc. and/or home support services such as homemaking, home maintenance, personal care and respite services (provincially defined).

This category excludes outreach services provided by hospital or community-services-based health professionals (e.g. home dialysis services provided by hospital staff, mental health services provided by the staff of a mental health outreach program).

Referred-In

A hospital client or specimen: that has been referred for hospital services from another health service organization; and whose person-identifiable data is recorded in the registration or information system of the organization and to whom a unique identifier is assigned to record and track services. Examples include: individuals referred from a health service organization for an MRI exam; respiratory services such as hyperbaric chamber and specimens to be tested by the clinical laboratory.

Note: This category is not used in the Newfoundland and Labrador master chart of statistical accounts.

Resident

An individual who has been officially accepted into a designated long-term care bed for the purpose of receiving one or more health services; and whose person-identifiable data is recorded in the registration or information system of the organization and to whom a unique identifier is assigned to record and track services. This category includes individuals admitted to residential facilities providing mental health or addiction services in a community setting (provincially defined).

This category excludes inpatients receiving services from hospital acute, rehabilitation, mental health and addiction services and palliative nursing units.

Facility/Organization/Citizen Partnership

A facility or organization that has been officially accepted by a health service organization to receive one or more health services; and whose encounter is recorded in the registration or information system of the organization and to whom a unique identifier is assigned to record and track services; or whose encounter is recorded within a uniquely-identifiable, hard-copy file or record (rather than in the organization's registration or information system) that is used to record and track services. Examples include: restaurants; swimming pools and day care centres to which environmental health and licensing services are provided; and schools, businesses or community organizations to which consultative services are provided regarding concerns such as policy development, food safety or healthy living.

A citizen partnership that has been established to address an identified health issue and whose membership consists of citizens or citizen groups and other key stakeholders (e.g. health care providers, community agencies) that have knowledge of the concern and/or could influence change; and, whose encounter may be recorded within a uniquely-identifiable hard copy file or record rather than in the registration or information system of the organization. Examples include: a "farm safety coalition" that was formed

to discuss ways to prevent tractor accidents amongst teenagers; a "food security coalition" organized to advance the concept of a food charter to support local agriculture products; and a "playground partnership" established to discuss ways to build a safe new play area that will meet the needs of the children in a low-income community.

Service Recipients not Uniquely Identified

An individual who receives one or more services from a health service organization when not currently registered as an inpatient, resident, client hospital, client community, client home care, facility/organization/citizen partnership; and whose encounter is not recorded in the registration or information system of the organization and who has no unique identifier assigned to record and track services. Examples include: individuals calling hotlines for counselling services; individuals attending drop-in centres; and participants attending a general forum on smoking cessation that is aimed at educating the community as a whole.

Workload, service activity and caseload status statistics must be recorded separately for each category of service recipient. This separation supports more detailed analysis of the data, providing an understanding of different resource needs, as well as supporting external reporting requirements.

3 PRIMARY ACCOUNTS – FUNCTIONAL CENTRES

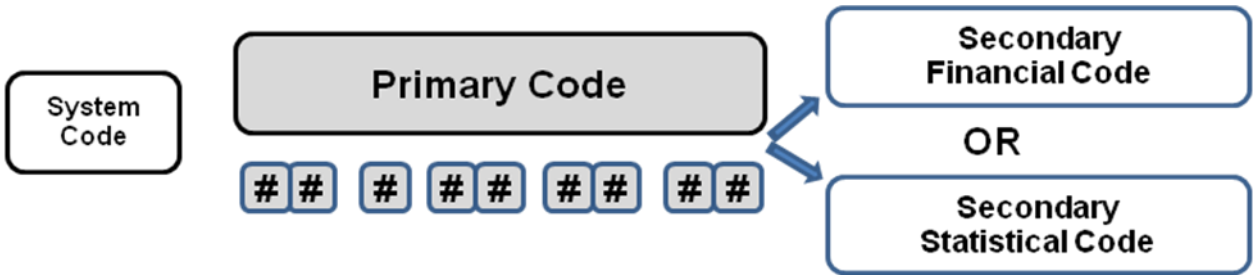

Figure 3

A key component of the MIS Standards is the functional centre framework. Functional centres are a type of primary account that forms the foundation of much of the reporting of the financial and statistical data within a health care organization. The functional centre framework is a five level hierarchical arrangement of departments or functional centres that recognizes the diversity in size and specialization of health service organizations. It provides a method for organizing information for both internal and external reporting purposes. The hierarchical arrangement allows varying sizes of health service organizations to use the structure and also permits information to be "rolled-up" or consolidated for external comparative reporting.

Each department or service that is a cost centre (has a designated budget) is assigned a primary account code. These primary account codes are typically used in conjunction with a secondary account code, to further label and define an account. This is required by a health service organization in order to track revenues, expenses and statistics associated with each department or service.

Primary account codes are made up of five segments; with a total of nine coding positions, which are structured in a specific manner (see Figure 4 below).

Figure 4

The following details the five segments of the primary account code:

Account Type

7 The 1st digit is the account type. The account number will always start with a 7 to indicate that this account represents a functional centre.

Fund Type

71 — The 2nd digit indicates the primary source of funding for this activity. The finance department will designate this digit. In most cases this will be a 1 to indicate global/operating funding.

Framework

71 1 — The 3rd digit indicates where the service was provided. Administration and support services are represented by 71 4 (see Figure 5).

Functional Centre (level 3)

71 1 ## — The 4th & 5th digits indicate the type of service provided. This is referred to as level three reporting.

Functional Centre (level 4)

71 1 ## ♦♦ — The 6th & 7th digits indicate further breakdown of services for some functional centres. These accounts are sub-categories of level three accounts. This is referred to as level four reporting.

Functional Centre (level 5)

71 1 ## ♦♦ ★★ — The last two digits of the primary account code are used to provide additional detail and may be reserved for board use in some situations. This is referred to as level five reporting.

Function centres are used to aggregate and integrate information concerning specific activities. The account assigned to a functional centre provides the reader of the information with insight into the activity that has generated the data reported. For example, the primary account number **71 1 95 20 00** tells the reader that data is related to patient/resident food services production (as illustrated below).

Refer to the Primary Account section of the MIS Standards for further information.

7	1	1	95	20	00
Account Type	**Fund Type**	**Framework Section**	**FC Level 3**	**FC Level 4**	**FC Level 5**
1- 6 Balance Sheet Accounts **7 Functional Centres for Revenue, Expense and Statistics** 8 Accounting Centre	**1 Operating Fund** 2 Inactive 3 Inactive 4 Board Designated 5 Capital 6 Special Purpose 7 Inactive 8 Endowment Revenue – Unrestricted 9 Endowment Revenue - Restricted	**1 Administration & Support** 2 Nursing Inpatient/ Resident 3 Ambulatory Care 4 Diagnostic & Therapeutic 5 Community & Social Services 6 Inactive 7 Research 8 Education 9 Undistributed	35 Respiratory 40 Pharmacy 45 Nutrition 50 Physiotherapy 55 Occupational Therapy 60 Speech-Language Pathology & Audiology 70 Social Work 75 Psychology 80 Pastoral Care 85 Therapeutic Recreation **95 Patient/ Resident Food Services**	Accounts specific to previous level and provide further breakdown. e.g. **20 Production** 30 Tray Assembly & Distribution 40 Ware-washing	Accounts specific to previous level and provide further breakdown.

Figure 5

Prior to reporting workload, all functional centre account assignments should be reviewed to ensure that workload data can be correctly linked to functional centres. In most organizations there will only be one functional centre for each therapeutic discipline but some larger organizations may elect to create lower level functional centres if the activities are provided by a distinct set of staff. This should only be done when the compensation, recoveries, expenses and activities can be clearly isolated. If this is not possible, one functional centre is appropriate and the workload statistics can be used to identify more specific details.

The primary accounts related to Food Service Administration are listed below with accompanying definitions.

71 1 95 Patient/Resident Food Services

71 1 95 05 Patient/Resident Food Services Administration
71 1 95 20 Patient/Resident Food Services Production
71 1 95 30 Patient/Resident Food Services Tray Assembly and Distribution
71 1 95 40 Patient/Resident Food Services Ware-washing

71 9 10 Non-Service Recipient Food services

71 9 10 20 Cafeteria
71 9 10 40 Catering
71 9 10 60 Coffee Shop
71 9 10 80 Vending
71 9 10 85 Meals on Wheels
71 9 10 90 Other Non-Service Recipient Food services

81 9 10 ** Food Services Clearing Account and Sub-Accounts (C)

These functional centres are defined as follows:

Patient/Resident Food Services (71 1 95)

The functional centre pertaining to the provision and preparation of food to meet the normal and therapeutic nutritional needs of inpatients, clients, and residents whose meals are provided by the health service organization. Includes baby food and formula; client meals; delivery and distribution of meals, and tray pick-up; and all similar services procured on a purchased service basis. Excludes clinical nutrition services 71 4 45, and non-service recipient food services 71 9 10.

Patient/Resident Food Services Administration (71 1 95 05)

The functional centre pertaining to the overall management and operational support for the entire patient/resident food services.

Patient/Resident Food Services Production (71 1 95 20)

The functional centre pertaining to the procurement and preparation of food provided to inpatients, clients and residents.

Patient/Resident Food Services Tray Assembly and Distribution (71 1 95 30)

The functional centre pertaining to the assembly, distribution and pick-up of meals, nourishment and water from the dietetic department to the patient/resident bedside and the processing of menus.

Patient/Resident Food Services Ware-washing (71 1 95 40)

The Functional Centre pertaining to the sanitizing of pots, utensils, dishes etc., for patient/resident food services.

Non-Service Recipient Food Services (71 9 10)

The Functional Centre pertaining to providing a range of food services to meet the needs of staff and others who are not the health service organization's service recipients. Includes all similar services procured on a purchased service basis.

Cafeteria (71 9 10 20)

The functional centre pertaining to the provision and preparation of food to meet the nutritional needs of staff and others whose meals may be provided by the health service organization cafeteria. Includes all activities of administration, production and ware-washing related to cafeteria and all similar services procured on a purchased service basis.

Catering (71 9 10 40)

The functional centre pertaining to the provision and preparation of food to meet the needs of groups and organizations whose meals may occasionally be provided by the health service organization. Includes all activities of administration, production and ware-washing related to catering and all similar services procured on a purchased service basis.

Coffee Shop (71 9 10 60)

The Functional Centre pertaining to the provision of coffee, meals, and sundries to staff and visitors of the health service organization. Includes all activities of administration, production and ware-washing related to the Coffee Shop and all similar services procured on a purchased service basis.

Vending (71 9 10 80)

The functional centre pertaining to the control, maintenance and stocking of the vending machines in the health service organization. Includes all activities of administration, production and ware-washing related to vending and all similar services procured on a purchased service basis.

Meals on Wheels (71 9 10 85)

The functional centre pertaining to the service which provides prepared meals to persons in their place of residence. It can also include a service to bring a person from his/her place of residence to the health service organization for specific meals. It includes all activities of administration, production and ware-washing related to meals on wheels and all similar services procured on a purchased service basis.

Other Non-Service Recipient Food Services (71 9 10 90)

The functional centre pertaining to non-service recipient food services not elsewhere classified. Includes all activities of administration, production and ware-washing related to other non-service recipient food services and all similar services procured on a purchased service basis.

Food Services Clearing Account (8* 9 10 Undistributed)

The accounting centre clearing account pertaining to those expenses which cannot be immediately associated with either patient/resident food services or non-service recipient food services.

4 SECONDARY FINANCIAL ACCOUNTS

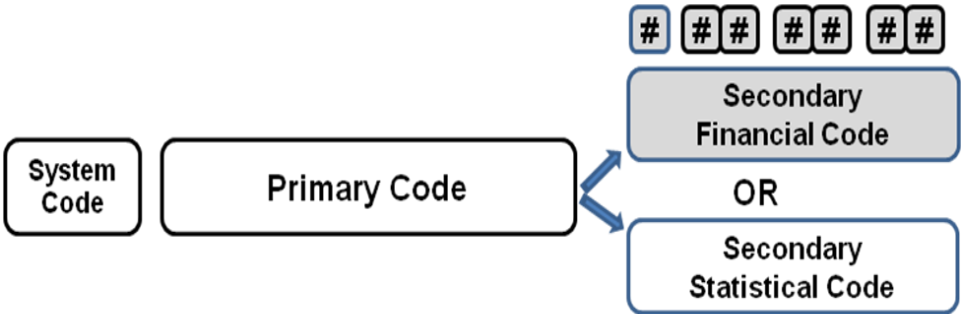

Figure 6

Secondary financial accounts are designed to provide additional information on the nature of revenues and expenses in an organization. Each secondary code is associated with an appropriate primary code. Financial accounts can then be linked to the secondary statistical accounts within the same functional centre to produce performance indicators for the functional centre. Secondary financial accounts establish the direct costs that are attributed to functional centres.

The secondary financial account code is made up of four distinct segments totalling seven coding positions. Secondary account codes are three, five or seven digits in length which are structured in a specific manner (see Figure 7).

Figure 7

Broad Group

4 The first block is a single character which identifies the secondary financial broad group. Broad group 4 is supplies. (See Figure 8 for further broad groups)

Nature of Secondary Revenue or Expense

50 The second block is two characters long and defines the nature of the revenue or expense. In this example it is supplies - food.

Capture of Further Detail of Secondary Revenue or Expense

40 The third block is used to capture further detail and is specific to previous code block. In this example it is supplies – food – bakery products.

Further breakdown of Secondary Revenue or Expense

00 In certain cases, the Newfoundland and Labrador Chart of Accounts, uses two more digits for further breakdown (provincially defined).

Secondary financial account **4 50 40 00** is used to represent supply expenses specific to food services (as illustrated in Figure 8).

4	50	40	00
Broad Group	**Nature of Revenue and Expense**	**Capture of further detail**	**Capture of further detail**
1 Revenues 2 Inactive 3 Compensation **4 Supplies** 5 Traceable Supplies & Other Expenses 6 Sundry 7 Equipment Expense 8 Contracted-Out Services 9 Buildings and Grounds Expense	Supplies for the following 10 Print/Stationary/ Office 15 Housekeeping 20 Laundry **50 Food** 60 Medical Surgical 64 Pharmacy 65 Drugs 66 Medical Gases	Accounts specific to previous level and provide further breakdown. 10 Meat, Fish, Poultry, Eggs 20 Dairy Products 30 Juices, Fruits, Vegetables **40 Bakery Products** 50 Groceries and Miscellaneous 60 Infant Formula 70 Enteral Feedings	Accounts specific to previous level and provide further breakdown.

Figure 8

The broad groups of secondary financial accounts are:

Revenue

Revenue is defined as proceeds earned by the health service organization from all sources including payment for services provided to service recipients, recoveries, contributed services, donations, grants and investment revenue. When revenue is generated in relation to clinical services for facility patients/residents/clients, this revenue is recorded as a recovery in the functional centre incurring the expense. This reduces the cost of providing service to these patients.

Compensation

Compensation is defined as the sum of gross salaries plus benefit contribution expenses. Compensation costs are linked to the functional centre.

For the purpose of capturing and reporting compensation expenses, the MIS Standards require all staff of a functional centre be assigned to one (or more) of three broad occupational groups; then further categorized by type of earned salaries. By doing so, the accuracy of analysis is improved and the degree of overhead support associated with the service is identified. The following is a list of broad occupational groups:

- management and operational support personnel (MOS);
- unit-producing personnel (UPP); and
- medical personnel (MP).

For each broad occupational group, the types of earned salaries should be further categorized as:

- worked salaries;
- benefit salaries; and
- purchased service salaries

Benefit contributions are an integral part of compensation expense. These costs must also be distributed to functional centres. The benefit contributions include salaries paid to casual and temporary staff in lieu of vacation, statutory holidays and termination. No hours are attached to these payments and therefore they are not included in benefit hours.

Supplies

Supplies are consumable products used by a functional centre. Accounts exist for items ranging from paper, computer supplies, test manuals and forms, medications and other clinical products. In order to make supply transaction coding more efficient, finance and materials management departments should coordinate the stores catalogue to link individual stock item codes to supply expense codes. All expense accounts should be reviewed to ensure that the items included in these accounts are appropriate and to ensure that the expenses for all functional centres are recorded accurately. Only those items used by the therapeutic departments should be charged to the therapeutic functional centre.

Traceable Supplies and Other Expenses

These are consumable supplies or other expenses that:

- can be directly associated with a particular service such as an operative; procedure or drug intervention;
- can be traced to a particular service recipient;
- vary according to the clinical needs of the service recipient; and
- usually do not behave linearly with workload.

Sundry

Sundry costs are those that do not fit into other categories. It includes items such as long distance telephone charges, courier charges, travel expenses, etc. Most sundry expenses and some supply expenses are intended for administrative and support functional centres and are actually overhead costs for the organization as a whole. Some organizations have elected to distribute these costs to functional centres. The primary purpose for distribution is better accountability for expenses. An example of an overhead supply cost is laundry. An example of an overhead sundry expense cost is postage.

Equipment Expenses

Equipment expenses are the operating expenses of equipment, including maintenance, repairs, depreciation, gain or loss on disposal, interest on equipment loans and rental or lease expenses incurred or any other operating expense incurred in the provision of equipment for use by functional centres in the facility. Depreciation costs for all equipment as well as preventative and repair costs for all clinical equipment are to be

expensed to functional centres. This will improve the comparability of costs across organizations. When comparing costs across organizations it is important to understand that there could be variations in the allocation methodology and reporting of these costs.

Contracted-Out Services

The contracted-out services expenses are those related to one of a group of services performed for the health service organization by a contracted-out third party provider using their personnel and often their supplies, equipment and premises. The fee charged may include a cost for these items as well as a mark-up for employee benefits and administrative and support expenses**.**

Buildings and Grounds Expense

Those expenses that are associated with the building, its service equipment and the grounds are usually charged to an accounting centre because it is not reasonable or practical to distribute to all functional centres in the organization.

4.1 Additional Secondary Financial Accounts

All food service operations are encouraged to use the following MIS Guidelines secondary expense codes (EOC's in the Meditech system) for costing food and dietary supply items to ensure standardization in data collection and use. The national definitions have been enhanced for greater clarity.

ACCOUNT 4 50 SUPPLIES, FOOD

450 10 Meat, Fish, Poultry, Eggs

This account is used to record the food supply expense of various meats, fish, poultry and egg products. Includes all frozen prepared entrees (e.g. macaroni & cheese, lasagna, tres-puree, beef stew), processed meats (e.g. bologna, wieners, chicken nuggets), and egg beaters. This account does not include canned meats (stew, sausages, tuna) or frozen soups.

450 20 Dairy Products

This account is used to record the food supply expense of various dairy products. This account will include thickened milk, regular milk shakes, ice cream, yogurt, sherbet, ice-cream novelties (polar bars, popsicles), creamers, whipped cream, butter, margarine and any 'edible non-dairy' substitutes (Riche's non-dairy creamers and Riche's whip).

450 30 Juices, Fruits and Vegetables

This account is used to record the food supply expense for various juices, fruits and vegetables (fresh, frozen or canned). Includes thickened juices but does NOT include dried fruit, maraschino cherries, fruit drinks or sparkling fruit beverages.

450 40 Bakery Products

This account is used to record the food supply expense of various bakery products such as bread, pastries, rolls, cakes, etc. This account would include 'prepared bakery items' such as proof and bake bread and rolls, pizza dough/shells, pie

shells, pitas, fajitas, waffles, French toast, pancakes, sheet cookies, frozen cookie dough and muffins. Frozen 'scoop and bake' muffins batter is included whereas any dry muffin mix is not.

450 60 Infant Formula

This account is used to record the food supply expense of commercially prepared milk mixtures or substitutes used for feeding infants. Does not include infant feeding supplies such as nipples.

450 70 Enteral Feedings

This account is used to record the food supply expense of nutrient preparations that are administered enterally to service recipients. This account also includes high calorie/high protein oral supplements such as Carnation Instant Breakfast™, Peadialyte Pops™, Junior Shakes™, Magic Cups™, supplemental puddings, high-energy bars and cookies (Boost bar, 206 cookies) and MCT oil.

Note: Supplies required for the administration of enteral feedings (tube feeding bags, tubing) are charged to 46066 Rubber Goods.

450 80 Groceries and Miscellaneous (Provincial account combining 450 50 and 4 50 90)

This roll-up account is used to record the food supply expense of various grocery items, as well as items included under account 4 50 90 food supplies not elsewhere classified in the national chart of accounts. Includes soups and soup bases (prepared, canned, or dried products), strained foods (such as baby food), teabags, tea and coffee products, beverages other than tea, coffee and juices (soft drinks, mineral water, Clearly Canadian™ drinks, CO2 for soft drink dispensers, hot chocolate), beverage deposits, seasonings, sugar, flour, starches, candies, liquor, canned meats, thickening agents, dried fruit, solid apple packs, fruit flavoured beverage crystals, muffin mix, cake mixes, pancake mix, biscuits, nutrigrain bars, individually wrapped rice krispie squares, water, rice, pasta, cereals, grains, additives, hors d'euvres such as mozza sticks, sausage rolls, etc. and other miscellaneous groceries.

Account 455 - Dietary Supplies

455 10 Dishes, Cutlery and Glassware– Reusable (Provincial account combining accounts 4 55 20, 4 55 40 and 4 55 60 using a newly named/defined provincial account number)

This combined account is used to record the expense of reusable china or plastic dishes (plates, bowls, cups), cutlery (knives, forks, spoons, etc.), and glassware (glasses, punchbowls, platters). Includes domes, serving trays and platters.

455 70 Dishes, Cutlery, and Glassware – Disposable

This account is used to record the expense of disposable dietetic supplies such as paper or plastic cups, straws, plates, bowls, cutlery, place mats, napkins, tablecloths etc. This account does NOT include paper towels (See account 4 15 10).

455 75 Dietetic Packaging

This account is used to record the expense of packaging materials used primarily by the dietetics department such as foil paper, foil pans, cry-o-vac bags, wax

paper, plastic wrap, sandwich bags, labels, press ware, etc. Also includes muffins liners, take-out containers, chip trays, party platters, doilies, basket liners, silicon paper, sandwich wedges, and parchment paper.

455 80 Utensils

This account is used to record the expense of utensils for preparing and serving of food; such as pots, pans, vessels, thermometers, scoops, hot water urns, coffee pots, water jugs, thermal servers, bus pans, cutlery trays, etc.

455 90 Dietary Cleaning Supplies

This account is used to record the expense of supplies primarily used in the cleaning of pots, pans, dishware, including stainless steel scrubbers, detergents, rinse agents, hood cleaners, degreasers, descalers, scrubbies, grill pads, and handy wipes.

Other Accounts of Interest to Food Service Operations

425 25 Staff Wearing Apparel – Disposable

This account is used to record the expense of disposable wearing apparel provided to employees such as paper masks, head coverings, shoe coverings, goggles, aprons, etc.

425 22 Staff Wearing Apparel - Reusable

This account is used to record the expense of reusable wearing apparel provided to employees such as coats, uniforms, coveralls, work gloves, rubber gloves and other wearing apparel.

460 65 Gloves

This account is used to record the expense of general medical and surgical supplies that include disposable, sterile and non-sterile gloves.

415 10 Paper and Disposable Supplies

This account is used to record the expenses of restroom supplies such as paper towels, sanitary paper, hand soap and other disposables, (Excludes plastic garbage bags – See account 41515).

460 66 Rubber Goods

This account is used to record the expense of general medical and surgical supplies which include miscellaneous tubings, bags, pouches, e.g. feeding bags and tubing.

696 00 Meeting Expenses (for expensing internal catering)

This account is used to record the expenses relating to meetings hosted by the health service organization. Includes room charges or rentals, meals purchased internally or externally, and any entertainment costs associated with a meeting. Excludes related travel expense, which is recorded in account 6 2* Travel Expense.

5 SECONDARY STATISTICAL ACCOUNTS

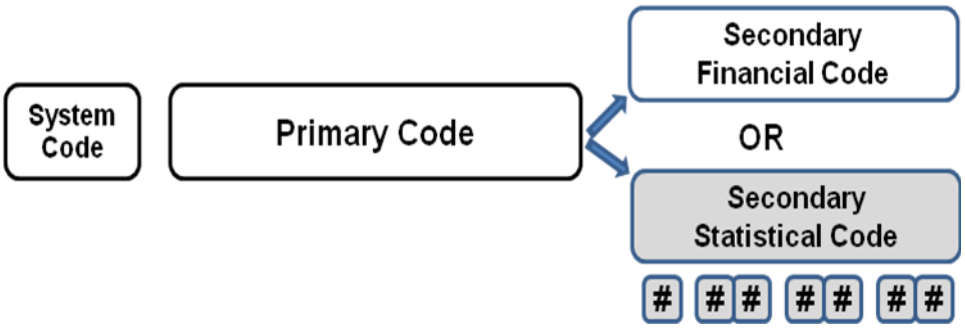

Figure 9

Secondary statistical accounts are designed to provide additional information on the nature of activities that occur within an organization. Each secondary code is associated with an appropriate primary code. Statistical accounts can then be linked to the secondary financial accounts within the same functional centre to produce performance indicators for the functional centre.

The secondary statistical account code is made up of four distinct segments totalling seven coding positions. Secondary account codes are three, five or seven digits in length. As with financial secondary accounts the first digit identifies the broad group. The remaining blocks provide additional detail with the meaning of each segment being dependent on the code used in the preceding segment.

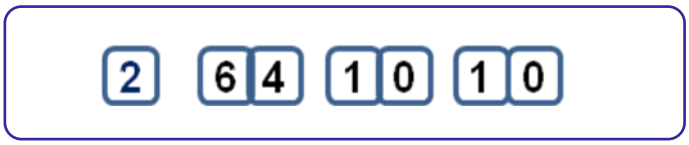

Figure 10

Secondary Statistical Accounts

2 The first block is a single character that identifies the secondary statistical broad group. In this example broad group 1, workload is used (see Figure 11 for further broad groups).

Nature of Statistic

64 The second block consists of two characters and identifies the statistic itself and is specific to the previous code block (example – service recipient meal days, etc.).

Capture of further detail of the Statistic

10 The third block is used to capture further detail and is related the nature of the statistic and is specific to the previous code block (example – category of service recipient).

Further breakdown of the Nature of Statistic

10 The fourth block is used to provide even greater detail on the nature of the statistic.

2	64	10	10
Broad Group	**Nature of Statistic**	**Capture of Further Detail**	**Additional Breakdown**
1 Workload **2 Staff Activity** 3 Earned Hours 4 Service Activity and Caseload Status 7 Functional Centre Operation 8 Health Service Organization Operation and Contracted-Out Services	Workload Units -Service Recipient Activities **64 Service Recipient Meal Days**	Category of Service Recipient **10 Inpatient** 20 Client Hospital 40 Resident 50 Facility/ Organization/ Citizen Partnership 60 Service Recipient not Uniquely Identified 80 Client Community 90 Client Home Care	Activity Category **10 Organization** 20 Other 30 Consultation/ Collaboration

Figure 11

The MIS Standards organizes all statistical data into six broad groups that identify the nature of the statistic. These broad groups are further explained below.

Secondary statistical accounts can only be reported at the level defined by the Department of Health and Community Services in the Provincial Chart of Statistical Accounts. If lower level accounts have been created for internal use, these must be “rolled-up” to the provincial account prior to data submission.

All statistics must be reported in the same functional centre as the activity took place. This includes workload, earned hours, service activity and caseload status statistics.

The broad groups of secondary statistical accounts are:

Workload

Workload statistics are those applicable to functional centres that have a workload measurement system (WMS) in the MIS Standards such as nursing, nutrition services, speech-language pathology, medical imaging and pharmacy. This workload data is important to functional centres as it provides information for the analysis of service volumes, productivity and costs.

Staff Activity

Staff activity statistics pertain to select activities performed by staff when fulfilling the service mandate of the functional centre. In some cases, these statistics may be used as a surrogate workload measure for functional centres that do not have a workload measurement system in the MIS Standards. For example, laundry can track the number of kilograms of clean linen issued, human resources can track the number of grievances resolved and payroll can track the number of pay cheques/stubs issued.

Earned Hours

Earned hours statistics are those that categorize earned hours by broad occupational group and type of hour. This data is collected by the organizations' compensation systems (payroll).

Service Activity and Caseload Status

Service activity and caseload status statistics pertain to the service activities provided by the nursing in-patient services and ambulatory care, diagnostic and therapeutic services and community health services functional centres. Examples of service activity statistics include visits - face-to-face, visits - non-face-to-face, in-house exams and inpatient days. These statistics supplement workload information by defining the complexity of service activities provided and are used to determine costs for these activities. Caseload status statistics describe the status of service recipients of current, past and future caseloads (i.e. admissions, discharges, transfers and new referrals).

Functional Centre Operation

Functional centre operation statistics are specific to the operation of a functional centre. They include those that describe its characteristics (e.g. physical size or capacity), catchment population and personnel complement.

Health Service Organization Operation and Contracted-Out Services

Health service organization operations and contracted-out services statistics pertain to the operation of the health service organization as a whole. They include the number of cardiac arrests, medication errors, different types of revenue days, clients receiving home health/home support services and changes in employee status. They also include data related to the physical facility, such as energy consumption, heating days and cooling days and to those services that are provided by a contracted-out third-party provider.

5.1 Patient Resident Food Service Department Statistics

The following statistics can be collected and reported by Patient Resident Food Service Departments. Those marked with (CMDB) are required for national reporting to the Canadian MIS Database (CMDB).

2 63 Service Recipient Food Trays Prepared

The regular and any additional early and late trays of food prepared for inpatients, residents, and clients of the health service organization.

By Category of Service Recipient

2 63 10	Inpatient
2 63 20	Client Hospital
2 63 40	Resident

By Type of Trays

2 63 ** 10	Regular
2 63 ** 20	Early
2 63 ** 30	Late

2 64 Service Recipient Meal Days

The meal days provided to inpatients, residents, and clients of a health service organization.

By Category of Service Recipient

2 64 10	Inpatient (CMDB)
2 64 20	Client Hospital (CMDB)
2 64 40	Resident (CMDB)

Prepared By

2 64 ** 10	Health Service Organization
2 64 ** 20	Others

2 65 Client Hospital Meals Served

The meals served to registered clients of the health service organization.

2 80 Non-Service Recipient Meal Days Prepared by Health Service Organization

The meal days provided to staff and others who are not inpatients, residents, or clients of the health service organization.

Prepared For

2 80 10	Staff and Visitors
2 80 20	Supplied to Other Health Service Organizations
2 80 30	Other

By Type of Meal Day

2 80 ** 10	Cafeteria
2 80 ** 20	Catering
2 80 ** 30	Coffee Shop
2 80 ** 40	Vending
2 80 ** 50	Other Non-Service Recipient Meal Day
2 80 ** 60	Courtesy Meals
2 80 ** 70	Meals on Wheels

2 81 Non-Service Recipient Meal Days Prepared by Others

(Non-Service Recipient Food services)

2 82 Catering Occasions

(Non-Service Recipient Food services)

5.2 Calculation of Meal Days

The meal day will be used as the primary measure of workload in food service operations.

The meal day is a recognized unit of measurement for food service volume and workload. In order to achieve uniformity it is essential that a single, universal method of meal day calculation be followed.

The frequency of reporting the meal days will be determined by the administration of the facility; however, monthly and annual reporting is suggested.

The calculation of meal days is based on the sum of Service Recipient and Non-Service Recipient Meal days. Meal days can be counted directly or indirectly (dollar amounts converted to an equivalent number of meal days). To facilitate accurate meal day reporting, a standardized approach is recommended for calculating the meal day value (or conversion factor) for cafeteria/vending, catering and pantry services.

Meal Day Values

The meal day value is the factor used to convert dollar values to meal days. The utilization of facility-specific meal day values adds validity to comparisons of meal day statistics among health care organizations. Based on this methodology, each facility must calculate its own meal day values annually for cafeteria/vending, catering, and pantry services.

Cafeteria/Vending Meal Day Value

Based on the recommendation from Health and Welfare Canada, the Newfoundland Department of Health and Community Services has established the provincial cafeteria meal day pattern as outlined on the "Cafeteria Meal Day Value" form (See Appendix A, Sample Forms, page 52). Use this pattern in obtaining the cafeteria/vending meal day value for each facility.

If breakfast is not served, the selling price for that meal should be estimated, so that the value will reflect the meal pattern.

Remember these selling prices and values will vary from one facility to another.

The cafeteria/vending meal day value will change as cafeteria selling prices change. The cafeteria selling price should be revised at regular intervals to reflect current costs. The selling price should cover the cost of food and other supplies and labour. It is essential that current selling prices be used to calculate the cafeteria meal day value. Taxes are not included in the cafeteria/vending meal day value.

Catering Meal Day Value

The catering meal day value is derived by applying the applicable up charge value to the cafeteria meal day value. It is possible that a particular facility will have more than one catering meal day value, for instance, 10% up charge for internal non-patient catering, and 20% up charge for external non-patient catering.

Pantry Meal Day Value

The pantry meal day value is the facility specific value derived by calculating the Direct Cost per Meal Day indicator. To calculate this indicator, see Figure 41 for a detailed explanation.

5.3 Meal Days

Service Recipient Meal Days

Inpatient Meal Days

In-Patient Days - The full and total day count of all registered in-patients (adults and children, excluding newborns), including those who are on intravenous feeding, clear fluids, or are NPO. The low cost of these three groups to the department is balanced out by the high cost of some tube feedings and special diets, e.g. renal and diabetic diets.

Extra Inpatient Meal Days - This includes the total number of additional trays provided for inpatients (e.g. call-backs, swallowing assessment trays) divided by 3 to equal the number of Extra Inpatient Meal Days.

Inpatient Pantry Supply Meal Days - See below.

Resident Meal Days

Resident Days - The full and total day count of all registered residents.

Extra Resident Meal Days - This includes the total number of additional trays provided for residents (e.g. call-backs, swallowing assessment trays, second servings) divided by 3 to equal the number of Extra Resident Meal Days.

Resident Catering Meal Days - Included in this category would be food for social events (e.g. birthday parties) which would be in addition to what is normally provided (3 meals + nourishments). Organizations should have a catering price list. The method of calculation is as follows:

$$\frac{\text{Catering Cash Recoveries (less taxes)}}{\text{Catering Meal Day Value}} = \text{Catering Meal Days}$$

Figure 12

Resident Pantry Supply Meal Days

See pantry supplies (page 29).

Client Hospital Meal Days

Client Hospital Meal Days (Tray Service) - Included in this category are meals for clients who participate in approved programs such as diabetes and psychiatry day care, day surgery, renal day care, as well as clients of the lab and emergency departments. The method of calculation is as follows:

$$\frac{\text{Number Of Client Hospital Meals Served}}{3} = \text{Client Hospital Meal Days (Tray Service)}$$

Figure 13

Client Hospital Meal Days (Cafeteria) - Included in this category are meals for Clients who have been authorized to receive food with a voucher from the cafeteria. The current cafeteria selling prices are applied to the menu items served and converted to meal days, by dividing the total value by the Cafeteria/Vending Meal Day Value.

$$\frac{\text{Total Cafeteria Costs related to Vouchers}}{\text{Cafeteria Meal Day}} = \text{Client Meal Days re Vouchers}$$

Figure 14

Client Pantry Supply Meal Days - See pantry supplies (next section).

Pantry Supplies

Pantry supplies include all food items supplied to patient/resident/client areas over and above the three meals plus nourishments provided in the meal day.

There are two established methods of accounting for pantry supplies:

1. Costs of pantry supplies are kept within the food service budget/actual. To determine the pantry supply costing price:

Raw Food Cost x 2.5 = Pantry Supply Costing Price

Figure 15

$$\frac{\text{Total Pantry Supply Costs}}{\text{Facility Specific Pantry Meal Day Value}} = \text{Pantry Supply Meal Days}$$

Figure 16

These are identified as related to inpatients, residents or clients and included in the meal days for that category of service recipient.

2. Costs of pantry supplies are transferred to cost centres or departments receiving supplies.

   When costs are transferred from the food service department to another cost centre or department, actual costs with no mark up are transferred, with a credit to the food service department resulting. In this case, there are **no** meal days calculated.

   The labour associated with this activity is absorbed in the overall departmental cost. This could also include supplies for parties or other patient/resident functions that are charged out at cost to another department.

Non-Service Recipient Meal Days

The non-service recipient meal day includes meals served to staff, visitors, volunteers, students, and equates to the sum of meal days derived from cash recoveries, internal recoveries and meals-on-wheels. This group includes all others who are not inpatients, residents or clients of the Health Service Organization.

Meal Days from Cash Recoveries

Cash recoveries include revenue from cafeteria sales, meal tickets, board rates, catering, vending machines, hostel meals, sales to other facilities, etc. The methods of meal day calculations are as follows:

Cafeteria

$$\frac{\text{Cafeteria Recoveries (less taxes)}}{\text{Cafeteria/Vending Meal Day Value}} = \text{Cafeteria Meal Days}$$

Figure 17

Catering is a special function, which involves the serving of food to another department/facility. Organizations should have a catering price list.

$$\frac{\text{Catering Cash Recoveries (less taxes)}}{\text{Catering Meal Day Value}} = \text{Catering Meal Days}$$

Figure 18

Vending

$$\frac{\text{Vending Cash Recoveries (less taxes)}}{\text{Cafeteria/Vending Meal Day Value}} = \text{Vending Meal Days}$$

Figure 19

Total Meal Days from Cash Recoveries = Cafeteria Meal Days + Catering Meal Days + Vending Meal Days

Figure 20

Meal Days from Internal Recoveries

Internal recoveries are determined by applying current catering and/or cafeteria selling prices to the food provided for catering activities, or in exchange for meal vouchers (e.g. guests, volunteers).

Internal Recoveries (Cafeteria) Meal Days

$$\frac{\text{Cafeteria Internal Recoveries}}{\text{Cafeteria/Vending Meal Day Value}} = \text{Internal Recoveries (Cafeteria) Meal Days}$$

Figure 21

Internal Recoveries (Catering) Meal Days

$$\frac{\text{Catering Internal Recoveries}}{\text{Catering Meal Day Value}} = \text{Internal Recoveries (Catering) Meal Days}$$

Figure 22

Total Meal Days from Internal Recoveries = Internal Recoveries (Cafeteria) Meal Days + Internal Recoveries (Catering) Meal

Figure 23

*Internal recoveries is a term which replaces what was formerly known as “non-cash revenues” or “non-cash recoveries”, in accordance with national MIS guidelines.

Meals-on-Wheels

The number of meal days related to a Meals-on-Wheels service is calculated as follows:

$$\frac{\text{Number of meals served}}{3} = \text{Meals-on-Wheels Meal Days}$$

Figure 24

Extra Non-Service Recipient Meal Days

Extra Non-Service Recipient Meal Days are additional meals served for patient/resident families (guest trays), staff on special occasions (e.g. Christmas), etc. The calculation is as follows:

$$\frac{\text{Number of meals served}}{3} = \text{Extra Non-Service Recipient Meal Days}$$

Figure 25

6 SERVICE ACTIVITY STATISTICS

Service activity statistics are captured in functional centres providing service recipient care. Together with caseload status statistics they identify the volume of activities that are provided to specific service recipients.

Service activity statistics supplement workload statistics in providing valuable information concerning the resources required for specific activities; they are intended to be used with matching workload statistics to measure functional centre productivity and the resource consumption of specific activities. These statistics are used with financial statistics to cost service recipient activity. The same categories of service recipients applied to workload statistics should be used with service activity and caseload statistics in order to identify the resource consumption of specific service recipient types (e.g. inpatient, resident and client hospital).

Service Activity Statistics

Service Recipient Food Trays Prepared
Service Recipient Meal Days
Client Hospital Meals Served

Figure 27

Required Statistics

- **Service Recipient Food Trays Prepared -** The regular, early and late trays of food prepared for inpatients, residents and clients of the health service organization. A sub-category of staff activity, broad group 2.

- **Service Recipient Meal Days -** The meal days provided to inpatients, residents and clients of a health service organization. A sub-category of staff activity, broad group 2.

- **Client Hospital Meals Served -** The meals served to registered clients of the health service organization. A sub-category of staff activity, broad group 2.

Special Recording Situations

- When developing the standard time for the production category, ensure that the time associated with the preparation of infant formula or the tube feeding is included.

- The largest time component of ice water rounds is the distribution. Therefore, include time spent on ice water activities (preparation and delivery) as part of the standard time for distribution.

- Total trays prepared should include regular trays plus all early trays and late trays. The standard time for production, or distribution should reflect the time per tray, whether early, regular, or late.

7 TURNING DATA INTO INFORMATION

7.1 Information Pathways

Financial Information is maintained in the Meditech systems of the Regional Health Authorities as well as the Client Pay Module of the Client and Referral Management System (CRMS).

Statistical information in Newfoundland and Labrador is collected by frontline staff in a number of ways:

- electronically (by spread sheet or computer program);
- as a by-product of charting (collected in the background in your computer system); or
- manually.

Regardless of the method of data collection, the information must be entered into the statistical general ledger of the regional Meditech system for regional use and external reporting.

Financial and statistical information is submitted electronically by the Regional Health Authorities to the Provincial MIS Database at the Department of Health and Community Services. The information is used for budget monitoring, service planning, resource allocation, etc.

The Department of Health and Community Services submits the data electronically to the Canadian MIS Database (CMDB) at CIHI. This information is used to determine Canada's health expenditures, meet international reporting requirements, calculate national economic indicators such as the gross domestic product and conduct health and health system evaluation and analyses. The diagram below illustrates the flow of financial and statistical information from the points of data collection within the Regional Health Authorities to the CMDB.

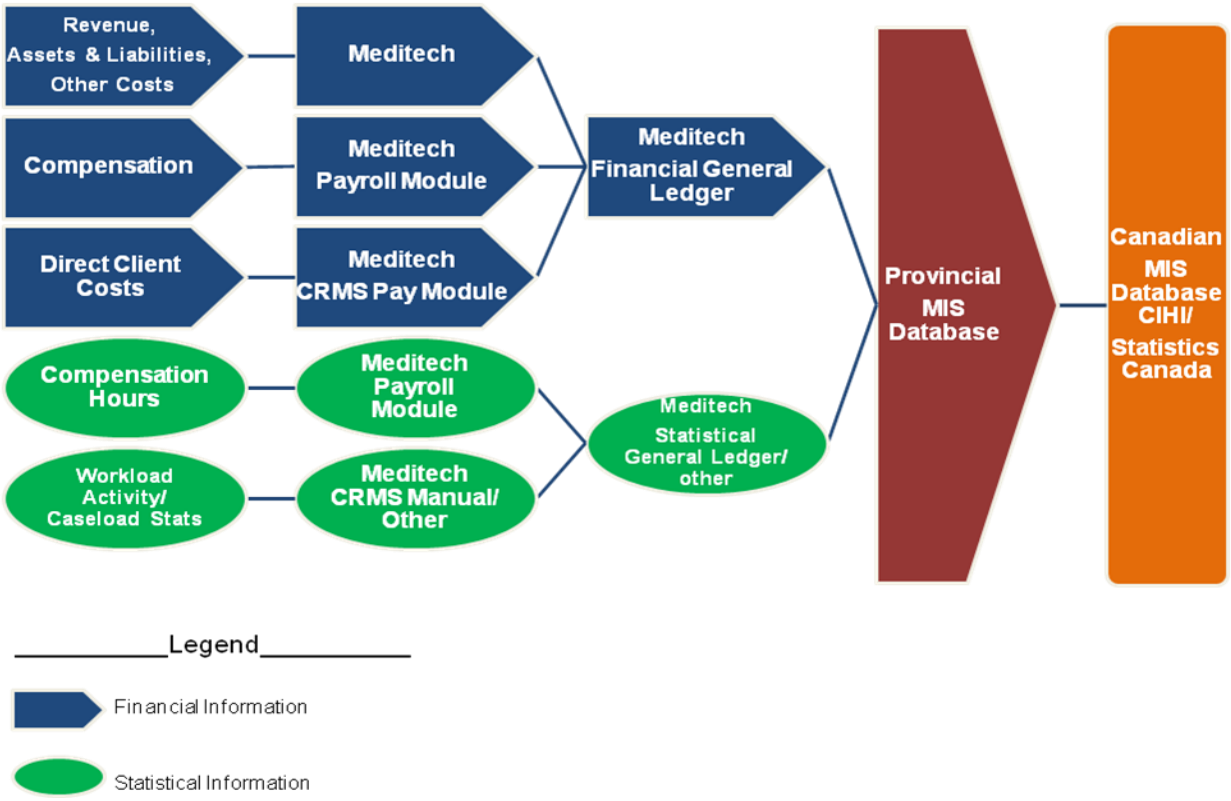

Figure 28

7.2 Performance Indicators

Data are statistics that, on their own, may not have a great deal of value or meaning. In order to be useful and relevant, good quality data must be turned into meaningful information which is accurate, timely, comprehensive, useable and relevant. When workload data is linked to financial or other statistical data to create performance indicators, the data can then be used for decision-making.

Indicators are ratios or percentages calculated from financial and/or other statistics that quantify a relationship between the data elements. Indicators measure performance and provide information that can be used to facilitate decisions or compare performance, such as, UPP worked hours per meal day (see Figure 31). They turn data into useful information.

The MIS Standards contain numerous indicators within the five categories of financial, staffing, productivity, utilization and workload. They can be used to analyze and interpret workload data, service activity and caseload status statistics and can assist staff and managers in analyzing and evaluating their services. Indicators are valuable decision-support tools for service planning, impact analysis and effective management.

Implementation of a workload measurement system and reporting of workload and other statistical data is not the ultimate goal however; the primary value in workload measurement is the use of the information to make better management decisions. This is essential in

order to gain value from the time, effort and dollars consumed in the workload collection process. Appropriate use of the information and feedback to staff will enhance understanding and support for accurate information, resulting in better data quality.

Selected examples of some key indicators, their calculations and interpretation have been included in this section:

- cost per workload unit;
- workload units per activity;
- cost per workload unit by service recipient type; and
- worked productivity

8 PERFORMANCE INDICATORS FOR FOOD SERVICES ADMINISTRATION

The Provincial Food Services MIS Committee has identified a number of indicators as being appropriate for use by its discipline. Additional indicators can be found in the MIS Standards.

8.1 Financial Indicators

Worked Hours (UPP) per Meal Day

This indicator calculates the average number of unit-producing personnel worked hours used to provide one meal day. To calculate this indicator, divide the total number of meal days producing in the period into the total number of worked hours of the Unit-producing Personnel for that same period of time.

Note: Worked hours for UPP staff include the following hours types – regular, actual overtime, actual call-back, various paid leave relief worked hours, unpaid leave relief, temporary assignment, orientation worked in the food service department, WHSCC ease-back, other worked, redeployed staff and extra workload.

$$\frac{\text{UPP Worked Hours in period}}{\text{Total Meal Days in period}}$$

Figure 29

Total Service Recipient to Total Meal Day

This indicator measures the proportion of the department's workload that represents service recipient food services. To calculate this ratio, determine the number of service recipient and non-service recipient meal days for a given period (preferably a year) using the table on page ??. From this information, calculate the patient/resident services ratio by dividing the total meal days into the service recipient meal Days.

$$\frac{\text{Total Service Recipient Meal Days}}{\text{Total Meal Days}}$$

Figure 30

Compensation Expenses per Meal Day (Total Service Recipient and Non-Service Recipient)

This indicator calculates the average compensation cost per meal day. It is calculated by dividing the total number of meal days for the period into the total compensation costs (salary and benefit costs for both management and operational support and unit-producing personnel) in that same period.

$$\frac{\text{Total Compensation Expenses (All 3 ** ** Accounts)}}{\text{Total Meal Days in Period}}$$

Figure 31

Food Supplies Expense per Meal Day (Total Service Recipient and Non-Service Recipient)

This indicator calculates the raw food costs associated with the production of one meal day. It is calculated by dividing the total food costs in the period (all expenses which roll up under code 4 50 **) by the total number of meal days (service recipient and non-service recipient meal days) produced in that same period.

$$\frac{\text{Total Food Costs in Period (}\textit{Do not subtract revenue)}\ \textit{(Provincial Secondary financial accounts 450 10, 20, 30, 40, 60, 70, 80)}}{\text{Total Number of Meal Days in Period}}$$

Figure 32

Direct Cost per Meal Day (Total Service Recipient and Non-Service Recipient)

This indicator calculates the average direct cost per meal day. It is calculated by dividing the direct operating expenses in the period (do not subtract revenue) by the total number of meal days (service recipient and non-service recipient meal days) in the period. *Direct Operating Expenses are the total of all compensation, supply, sundry, equipment and other costs spent in the period.*

$$\frac{\text{Direct Operating Costs in Period}}{\text{Total Meal Days in Period}}$$

Figure 33

8.2 Staffing Indicators

Number of Full-Time Equivalents (FTE) by Broad Occupational Group

Number of FTE by broad occupation group is the average number of full-time equivalents for each broad occupational group (management and operational support, or unit-producing personnel). It is calculated by dividing the earned hours for all employees (full-time and part-time) in a specific broad occupational group by the normal earned hours for a full-time equivalent in that specific group in a given period.

$$\frac{\text{Total Earned Hours for All Staff in a Broad Occupational Group}}{\text{Normal Earned Hours for one FTE in a Broad Occupational Group}}$$

Figure 34

The number of UPP FTEs can be further analyzed by occupational class by modifying this formula.

Worked Hours to Total Earned Hours (%)

Worked Hours to Earned Hours is the proportion of earned hours that is attributable to the worked hour's component. It is calculated by dividing the total worked hours by the total earned hours in a given period. This indicator may be calculated for a given functional centre, broad occupational group or occupational class.

$$\frac{\text{Worked Hours}}{\text{Earned Hours}} \times 100$$

Figure 35

A similar calculation can be used to analyze the types of worked hours (e.g. determine the proportion of Worked Hours that were regular hours vs. overtime hours).

Benefit Hours to Earned Hours (%)

Benefit hours to earned hours is the proportion of earned hours that is attributable to the benefit hour's component. Benefit Hours are periods of paid absence such as sick leave, vacation, education leave, etc. It is calculated by dividing the total benefit hours by the total earned hours in a given period. This indicator may be calculated for a given functional centre, broad occupational group or occupational class.

$$\frac{\text{Benefit Hours}}{\text{Earned Hours}} \times 100$$

Figure 36

A similar calculation can be used to analyze the types of benefit hours (e.g. determine the proportion of Benefit Hours that were related to sick leave, education leave).

8.3 Productivity Indicators

Worked and Total Productivity are commonly used indicators; the ratios of Worked and Total Productivity shows the amount of staff time spent in Service Recipient activities versus the total time spent carrying out the mandate of the service. While Worked Productivity is an important indicator on its own, it should not be used exclusively as it does not take into account time spent in Non-Service Recipient activity which can be significant in some functional centres. Both of these indicators can vary depending on the type and location of the service, as well as the support available to UPP staff and should be reviewed keeping these factors in mind.

Distribution of Service Recipient Meal Days (by Category of Service Recipient)

This percentage calculates the proportion of service recipient meal days provided for each category of service recipient, inpatient, client hospital and resident. It is calculated by dividing the meal days for each specified category by the total service recipient meal days for the period and multiplying by 100.

$$\%\ \text{Inpatient} = \frac{\text{Inpatient Meal Days}}{\text{Total Service Recipient Meal Days}} \times 100$$

$$\%\ \text{Client} = \frac{\text{Client Hospital Meal Days}}{\text{Total Service Recipient Meal Days}} \times 100$$

$$\%\ \text{Resident} = \frac{\text{Resident Meal Days}}{\text{Total Service Recipient Meal Days}} \times 100$$

Figure 37

Inpatient/Meal Day to Inpatient/Resident Day

This ratio calculates the ratio of meal days provided to inpatients/residents to the number of inpatient/resident days generated by inpatients/residents. This ratio indicates the degree to which the number of meal days produced matches with the Inpatient/Resident days. A ratio greater than 1.0 indicates additional meal days (extra and pantry) were provided. To a certain degree, this is expected given the changeable food service needs of inpatients/residents. However, this measure may provide managers with evidence of unnecessary meal production which could be reduced. This ratio can be calculated as follows:

$$\frac{\text{Number of Inpatient/Resident Meal Days}}{\text{Number of Inpatient/Resident Days (includes adult/child, not newborns)}}$$

Figure 38

Food (excluding enteral food) Costs per Meal

This ratio calculates the food costs, excluding enteral foods, associated with the production of one meal day. It is calculated by dividing the total food costs in the period (all expenses which roll up under code 4 50 ** except 4 50 70) by the total number of meal days (service recipient and non-service recipient meal days) produced in that same period.

$$\frac{\text{Total food (excluding. enteral food) costs in period}}{\text{(Provincial Secondary financial accounts 450 10, 20, 30, 40, 60, and 80)}}$$
$$\text{Total number of meal days in period}$$

Figure 39

9 IMPORTANT POINTS ABOUT DATA COLLECTION

Secondary statistical information, such as, workload, service activity and caseload status statistics, is collected by unit-producing personnel (UPP) only.

Care should be taken to ensure that only the worked hours of staff (UPP) are matched to the workload that is generated, as these two pieces of data will be used to produce productivity information. Failure to accurately match these data elements will skew productivity indicators.

When management staff members provide direct care (unit-producing) for a portion of their time, their workload and earned hours for that time should be included in the functional centre totals.

Workload measurement collection expectations and targets should be incorporated into:

- staff orientation programs;
- job descriptions for all staff;
- performance evaluations and reviews; and
- the strategic goals of the organization.

Maintenance of workload measurement systems requires:

- involvement of all staff;
- formal annual review by staff or whenever there are changes in service recipient types or care processes;
- on-going in-service education; and
- regular reliability testing.

Manager responsibilities:

- provide leadership for implementation;
- ensure adequate reference material is available;
- understand all components of the system;
- regularly monitor the results to ensure data quality;
- investigate sources of inconsistent data;
- use the information to support decision-making; and
- provide feedback to all staff recording workload (e.g. individual reports, discussion of analysis).

Staff responsibilities:

- record data accurately to quantify services provided;
- record data in a timely manner;
- accurately measure the resource requirements of their patients;
- understand the workload measurement system, both recording and interpretation of results; and
- share knowledge with new staff, such as accurate use of reference material.

10 RESOURCES

National Resource Materials

The Standards for Management Information Systems in Canadian Health Services Organizations (MIS Standards) are published on CD-Rom bi-annually by CIHI. A copy is sent to the Chief Financial Officers of each Regional Health Authority, the DHCS and the Centre upon release by CIHI. Further details regarding all topics enclosed in this reference guide are contained in the MIS Standards. If you require access to the national MIS Standards, please contact the appropriate regional financial department.

Provincial Resource Materials

Resource documents and information available from the MIS staff of the Centre include:

- Provincial Reporting Requirements User Guide
- discipline specific reference guides;
- information sheets relating to earned hours, workload, data quality and statistical data collection (FACT sheets);
- audit tools and answer guides;
- discipline specific indicator reports;
- annual statistical summary;
- annual Nursing Report Card; and
- current membership lists and Terms of Reference for MIS committee.

Resource documents and support are also available through MIS Committee members.

Education

CIHI provides a series of education sessions including eLearning and WebEx sessions on an on-going basis and in-person sessions a minimum of once per year. The topics for these sessions vary and a current schedule may be obtained either through CIHI's website or by contacting the MIS Staff at the Centre. Educational workshops are also available through the Centre and can be customized for specific needs and offered on a site specific or regional basis.

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Appendix A

Sample Forms

CAFETERIA MEAL DAY VALUE
Calculation

Date _____

Meal Period & Menu Item		Selling Price before Taxes
BREAKFAST:	Juice	
	1 egg scrambled	
	2 slices toast	
	butter (2 patties)	
	hot beverage	
AM BREAK:	muffin	
	coffee (cream & sugar)	
LUNCH:	soup	
	casserole (macaroni & cheese)	
	side salad	
	dessert (pudding)	
	milk	
PM BREAK:	tea (cream & sugar)	
DINNER:	juice	
	main entrée (roast beef)	
	potato	
	vegetable	
	dessert (pie)	
	milk	
Total Meal Day Price = Meal Day Value		

Prepared by: _____

MONTHLY MEAL DAY STATISTICS REPORT

FACILITY NAME: _____ MONTH: _____ YEAR: _____

	CATEGORY	MEAL DAYS
1. SERVICE RECIPIENT MEAL DAYS		
A	**INPATIENT MEAL DAYS**	
	INPATIENT DAYS	
	EXTRA INPATIENT MEAL DAYS	
	INPATIENT PANTRY SUPPLY MEAL DAYS	
	INPATIENT MEAL DAY TOTAL (MIS #264 10 00)	
B	**RESIDENT MEAL DAYS**	
	Resident Days	
	EXTRA RESIDENT MEAL DAYS	
	RESIDENT CATERING MEAL DAYS	
	RESIDENT PANTRY SUPPLY MEAL DAYS	
	RESIDENT MEAL DAY TOTAL (MIS # 264 40 00)	
C	**CLIENT HOSPITAL MEAL DAYS**	
	CLIENT HOSPITAL MEAL DAYS – TRAY SERVICE	
	CLIENT HOSPITAL MEAL DAYS - CAFETERIA	
	CLIENT HOSPITAL PANTRY SUPPLY MEAL DAYS	
	CLIENT HOSPITAL MEAL DAY TOTAL	
	TOTAL SERVICE RECIPIENT MEAL DAYS (MIS# 264 00)	
2. NON-SERVICE RECIPIENT MEAL DAYS		
A.	**CASH RECOVERIES**	
	CAFETERIA MEAL DAYS	
	CATERING MEAL DAYS	
	VENDING MEAL DAYS	
	CASH RECOVERIES TOTAL	
B	**INTERNAL RECOVERIES**	
	CAFETERIA MEAL DAYS	
	CATERING MEAL DAYS	
	INTERNAL RECOVERIES TOTAL	
C	**MEALS ON WHEELS MEAL DAYS**	
D	**EXTRA NON-SERVICE RECIPIENT MEALS DAYS**	
TOTAL NON-SERVICE RECIPIENT MEAL DAYS (MIS# 280 00)		
	TOTAL MEAL DAYS	

CAFETERIA CONVERSION FACTOR_____
CATERING CONVERSION FACTOR _____
VENDING CONVERSION FACTOR _____

Note: if supply chains are transferred “at cost” to the Requisitions Department, do not convert to Meal Days.

This form represents the minimum level of detail to be reported. This can be modified to capture additional detail under the various headings.

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