

Department of Human Services
Clinical Standards (ExcelCare) Subcommittee

**ExcelCare Standardised Education
Framework**



The Clinical Standards Subcommittee provides a corporate and strategic direction and support in the use, maintenance and evaluation of the Nursing Clinical Information System (ExcelCare) and its databases as applied to nursing practice.

A key aim of the Clinical Standards Subcommittee is to establish and maintain a consistent education and training process.

The following document outlines two modules for ExcelCare Education. While there will be site-specific information related to ExcelCare, interfaces, and business rules, the general concepts presented in each module will provide a standardised approach to ExcelCare education across the health units.

Module 1 is for the beginner and outlines general concepts of ExcelCare. It takes the beginning clinician through the steps of patient admission, creation of a care plan, reviewing a care plan, approving a care plan, transfer of a patient, discharge of a patient, changing shift and projecting for the next shift.

Module 2 is for the more advanced user with a program to gain a more detailed understanding of UOC's, care plan auditing, direct time, indirect time, projected time, required NHPPD and patient costings.

As health units will vary in their use of the Pathway module and the Quality Management module it is recommended that health units educate staff regarding these modules as required.

The modules are to be used as a prompt and basis for education and training at each health unit.

Beginner: ExcelCare Module 1

EXCELCARE CONCEPTS:

- **A Care Planning Tool:** ExcelCare is a clinical information system, which assists the nurse to develop, review and document a care plan for the individual patient, based on continual patient assessment.
- **A Care Plan:** Following patient assessment, appropriate Units Of Care are selected from the database and activated to form a care plan.
- **Health Unit UOC defined:** A Unit Of Care describes a nursing activity. It is made up of observations and interventions which describe the activity, the staff classification for the activity, the time taken to complete the activity and the frequency for which the activity is performed.
- **Corporate UOC's:** Until recently, UOC's have been developed and reviewed at a site level. There is now a process in place for UOC's to be reviewed collectively by all health units who use ExcelCare. This means that some UOC's will be the same at each health unit.
- **Corporate UOC defined:** A Unit Of Care (UOC) describes a nursing activity. The UOC is a nursing standard, which reflects best practice is made up of a Standard Statement, Process Standards, and Outcome Standards.
 - The **Standard Statement** is a concise statement of the goal to be achieved.
 - A **Process Standard** defines what each stage of an activity should achieve. The process standard is evidenced-based or best consensus practice.
 - **Observations and Interventions** (OI's) are the individual elements of care that, when grouped together, make up a process standard. Each OI has attached:
 - the skill level of the nurse able to provide the care pertained in the activity,
 - the average time required to perform the activity, and
 - the frequency and/or time of the activity.
 - Each UOC will have one or more **Outcome Standards**.
An outcome standard is the desired end result, or effect on nursing care delivery.
Outcome standards define:
 - The expected change in the health status of the patient after receiving nursing care and/or,
 - The expected change in the environment after nursing care and/or,
 - The expected effect of the care activity as indicated by the patient and/or,
 - The expected minimal documentation.
- ExcelCare as a **Clinical Information System**. As well as a care planning tool, ExcelCare is also a **staffing/dependency** tool, and a **quality management** tool.
 - It enables the prediction of staffing requirements and also allows the ability to view the time and approximate costs of varying aspects of nursing care. Reports, relating to time and cost, are produced on a regular routine basis.
 - As the data in ExcelCare is an accurate electronic documentation of patient assessment and care planning, it can be used for quality information and reporting. Reports, such as UOC Occurrence Reports, can be collated for auditing or clinical research purposes.
- **Shifts:** Each patient must have their care plan reviewed and approved each shift to ensure its accuracy and currency. When all patient care plans have been approved the shift must be changed to the next shift. The shift on ExcelCare needs to be kept up to date with the actual shift. For example:
 - Shift 1 = Early (0700 - 1400)
 - Shift 2 = Late (1500 - 2200)
 - Shift 3 = Night (2300 - 0600)
- **Time rounding:** ExcelCare manages time in hours rather than minutes. Time will be rounded up/down to the nearest hour. For example, Patient's admitted at 1416, will have their admission documented as 1400.
- **Confidentiality:** Confidentiality applies to the patient's electronic information and the information in ExcelCare needs to be considered in the same way that any documentation is considered.

- **Electronic signature:** Accessing ExcelCare requires a user number and password. The user number and password to ExcelCare is unique to each staff member. The user number will correspond with the staff members' employee number. The password needs to be considered in the same way that an ATM password or any other electronic password is considered and used. The password is to be kept confidential and NEVER shared. Each time a change is made to a patient's care plan, the staff member who has logged on to ExcelCare will be recorded permanently as having made that change to the patient care plan. Approving a patient's care plan needs to be considered the same as signing written documentation.
- **Legalities of care plan:** Creation and review of a patient care plan needs to be considered in the same way as any documentation within the hospital environment. Each time a care plan is approved, the system will record the date, shift and staff member approving the care. These files are kept permanently and can be accessed at any time by the System Coordinator. The care plan therefore needs to accurately reflect the patient's assessment at all time.
- **ExcelCare in the current climate:**
 - **Enterprise Bargaining:**

In the Nurses Enterprise Bargaining Agreement 2001 it was agreed that in relation to staffing of inpatient units,

 - (i) The DHS undertakes to prepare a brief to seek requests for information (RFI) from the marketplace for the purpose of finding a replacement to the existing ExcelCare system. The DHS is to establish a Reference Group to give advice on the RFIs and to guide the Government in its decision on a replacement system. The ANF is to be included in the membership of the reference group. The DHS gives a guarantee that the new system is to be determined by Government by the end of March 2002 and implemented by August 2002.
 - (ii) Following implementation of the new system (referred to in the previous paragraph) in August 2002, health units are to staff according to the staffing plans generated under the new system.
 - (iii) Until that new system is implemented in August 2002, the following arrangements are applicable:
 - (a) Hospitals to staff in accordance with ExcelCare (where the system has been implemented) wherever possible;
 - **Shift by Shift Staffing Requirements Decision Making Tree:** To assist staff in 'Staffing to ExcelCare' a decision making tree was developed. The decision making tree defines the sequential decision making steps to be undertaken in priority order for the provision of staffing to meet patient care requirements.
 - **Operational Issues Associated with ExcelCare:** To assist in the consistency in which ExcelCare was utilised at each health units, a guideline document outlining availability of projection and NHPPD information at ward level, review of UOC's, timings within ExcelCare, the use of Time Adjust, and education of nurses using the system was developed.
- **Replacement of the Clinical Information System:**

There was no clear preference for any of the system solutions proposed during the tender process.

Following discussions with the ANF and the current contractor of the existing ExcelCare product (HealthSolve), the Department of Human Services is facilitating a process to ensure that the current system continues to be maintained. In particular, there will be a priority to stabilise the current product whilst further investigation is completed on the opportunities to pilot an upgraded product.

 - Where to find information **Manuals**
 - Contacting the health unit **Help Desk** during business hours, after business hours.
 - **Troubleshooting:** Common issues at the health unit and how to get around them. E.g. "This patient is currently locked by another node."

NETWORK CONCEPTS:

- **Network/Interface:**

PMI: In most hospitals ExcelCare is interfaced with, or networked to, the hospitals' mainframe computer system. This means that patient admissions, transfers, leave and discharge transactions must be completed in the 'Patient Master Index' (PMI) system. This information is then sent to ExcelCare.

Nurse Rostering System: ExcelCare is interfaced with ProAct, the nurse rostering system which allows for reporting on staffing and patient costing.

- **Backup:** ExcelCare data is automatically copied on to a tape each day. This 'backup' process ensures that an up to date copy of patient care planning information is always available should there be any equipment failure. During this process, users will be unable to access the system. The 'backup' procedure will usually be completed within two hours.
- **Network log in/ Network passwords.**

EXCELCARE PROCEDURES:

- ExcelCare **log in**
- ExcelCare **log out** (Shift + F1)
- ExcelCare **passwords**
- **Special Message** to all Users: This message may appear. Read it and move on by pressing Enter.
- **Important ExcelCare Keys:** There are a number of function keys that are used in ExcelCare. These will be referred to as we work through the process of care planning.
- **ExcelCare Menu's:**
 - There are 3 menu's. These are Clinician, Manager and Logoff. Press ENTER on either Clinician or Manager to access further menus options.
 - Selecting an option in any of the ExcelCare menus can be done by using the:
 - keyboard arrow keys, or
 - hot keys (red letters), or
 - mouse.

Clinician Menu

Admit screen (if no interface)

- Mandatory fields

Design plan screen

- Explanation of **fields** on screen including:
 - Top right hand corner box information (user, ward, date, shift)
 - MRN
 - Patient Admit Date
 - Patient Last Approved Date
 - Allergies
 - Care Plan Fields: UOC, Activate Date/Time, Deactivate Date/Time
- **Selecting a patient** for care planning
 - There are 3 methods to select a patient for care planning. These include by MRN, Surname or using the F2 find function.
 - Type MRN
 - Press F2 then type Surname
 - F2 find function
- **Re-calling a previous care plan**
 - A previous care plan can be re-called to assist in the creation of a new care plan.
 - Shift + F2 function will recall the previous care plan of the patient.
 - UOC's can be selected for the new care plan by pressing Enter on the applicable UOC (highlights red)
 - F9 function to save care plan
 - Type Activation date (Discuss format)
 - Type Activation Time (Discuss format)

- **Creating a new care plan**
 - There are 3 methods of selecting a UOC(s) for the care plan. These include by category, by code or by code number.
 - **UOC selection by category** – F2 find function
 - Shift + F1 function to view the long/short text of the UOC
 - Enter to select a UOC (highlights red)
 - Enter again to un-select a UOC
 - F9 function to save to care plan
 - Selecting from other categories
 - Activation Date will default
 - Activation time will default/will need to be entered (Discuss format)
 - **UOC selection by code** – F2 find function/ key word search
 - Shift + F1 function to view the long/short text of the UOC
 - Enter to select a UOC (highlights red)
 - Enter again to un-select a UOC
 - F9 function to save to care plan
 - Selecting from other categories
 - Activation Date will default
 - Activation time will default/will need to be entered (Discuss format)
 - **UOC selection by code number** – manual entry
 - Type UOC code in field
 - Type Activation date (Discuss format)
 - Type Activation Time (Discuss format)
 - Shift + F5 function to view the long/short text of the UOC
 - F9 function to save care plan
- **Reviewing an Existing Care Plan**
 - Reviewing a patient care plan involves the activation and deactivation of UOC's to ensure that the care plan is accurate based on patient assessment.
 - Activation:
 - As above for Create a New Care Plan
 - Type activation date and time for the clinically appropriate date/time
 - *Note: UOC's can not be entered retrospectively, but can be added in advance*
 - F9 function to save care plan
 - Deactivation:
 - Type deactivate date and time for the clinically appropriate date/time
 - Alt + W on the UOC to deactivate a UOC. Inserts current date and time or the shift commencement date and time.
 - F9 function to save care plan
- **Re-ordering UOC's**
 - Re-ordering UOC's is a useful tip to ensure that the appropriate UOC's are activated on the care plan.
 - Shift + F1 in design care plan screen to re-order by either code, user specified, or activation date and time
 - F9 function to save care plan
 - Control + N to create a new line
- **Approving the Care Plan**
 - Approval intervals (Health unit specific)
 - F10 in design plan to access 'APPROVE'
 - F9 function to save care plan and clear screen
- **Print care plan**
 - F10 in design plan to access 'Print Plan'
 - F9 function to execute command
- **Transfer a patient**
 - The patient's care plan must be approved prior to transfer.
 - The transfer information will be interfaced from the PMI system where there is an interface.
 - The transfer can be completed via either the Design Plan screen or the Transfer screen.

- In DESIGN PLAN, F10 to access 'TRANSFER', F9 to execute command.
- In TRANSFER, F9 to execute command.
- **Discharge a patient**
 - The patient's care plan must be approved prior to discharge.
 - The transfer information will be interfaced from the PMI system where there is an interface.
 - The Discharge can be completed via either the Design Plan screen or the Discharge screen.
 - In DESIGN PLAN, F10 to access 'DISCHARGE', F9 to execute command.
 - In DISCHARGE, F9 to execute command.
- **Change shift**
 - When all Nursing Care Plans have been approved and all discharges and transfers have been processed, then ExcelCare can be moved forward to the next shift.
 - In CHANGE SHIFT, F9 to execute command.

Manager Menu

- **Shift Projection**
 - To project the staffing requirements for the next predetermined interval (ie shift, day) select STAFF/COST, STAFF, PROJECT.
 - Accept the default options. (If projecting for the next shift, change the default shift/date)
 - Ensure that the date and shift for projection is correct.
 - F9 to execute command.
- **Print Projection times**
 - To print/preview the staffing requirements for the next predetermined interval (ie shift, day) select STAFF/COST, STAFF, PRINT.
 - Enter the data fields as appropriate.
 - F9 to execute command.
- **Change Station**
 - There are some circumstances where you may be required to change to another station.
 - Select CHANGE STATION, press ENTER.
 - ExcelCare will return the original ward after logging out.

Advanced: ExcelCare Module 2

In this module, UOC's will be discussed/reviewed in greater detail. UOC's form the building blocks of ExcelCare. Each UOC includes the text (incorporating evidence-based practice), time, frequency and skill mix for the activity. It is important to be able to locate all of this detail in ExcelCare.

Information from ExcelCare is used in relation to staffing and patient costings. This information comes from the UOC's activated on each patient's care plan, therefore data integrity is vital to ensure the information used from ExcelCare is accurate.

The routine approval of patient care plans ensures the care plan accurately reflects patient assessment and is a means to ensure data integrity. On a larger scale it is important that UOC's are reviewed to ensure that they reflect current best practice and time.

A MORE DETAILED UNDERSTANDING OF UOC'S:

- **Printing UOC O/I Detail:** Observations and Interventions (OI's) are the individual elements of care that, when grouped together, make up the process standards of a UOC. Each OI has attached:
 - The skill level of the nurse able to provide the care pertained in the activity;
 - The average time required to perform the activity; and
 - The frequency of the activity.

Note: The time for the O/I will be accrued according to the frequency. For example, if the average time for the O/I relating to BGL is 4 minutes, but the frequency is 4/24, a total of 24 minutes will be accrued over the 24 hour period.

Manager Menu

- To view either the text, skill mix, time or frequency attached to a unit of care, select STANDARD, PRINT, UOC OI DETAIL
 - Type the UOC code (beginning code and ending code)
 - Select Sequential (S) or Alphabetical (A)
 - Select LONG (L) or SHORT TEXT (S) or BOTH (B)
 - Select PRINTER (P) or SCREEN (S)
 - F9 to execute command
- **Printing Standards Manual:** Each UOC is made up of a Standard Statement, Process Standards, and Outcome Standards.
 - Manager Menu
 - To view the Standard Statement, Process Standards and Outcome Standards, select STANDARD, PRINT, STANDARDS MANUAL.
 - Type the UOC code (beginning code and ending code).
 - Select Sequential (S) or Alphabetical (A).
 - Select Yes (Y) or No (N) to print GOAL, OUTCOME, LONG TEXT, SHORT TEXT.
 - Select PRINTER (P) or SCREEN (S).
 - F9 to execute command.

- **Customize UOC**

A customized UOC can be used to reflect individual patient care needs that are unique. Users can customize:

- an existing Unit Of Care; or
- a new UOC.

Prior to customizing a UOC:

- Search the ExcelCare database for relevant existing UOC's;
- Contact ward resource person/other advanced users; and/or
- Contact the ExcelCare coordinator for advice as required.

As per the Operational Issues Associated with ExcelCare, customized UOC's are audited regularly.

Customize an Existing UOC

Clinician Menu

- In Design Plan, with the cursor on the UOC to be customized, press F10 to access the top menu, select Customize.
- There are two options of customization:
 1. Customize O/I, or
 2. Customize Outcome.
- Customize O/I is the most common option.
- Type the appropriate changes to the UOC in the long text, short text, staff skill, time or frequency fields as required.
- F9 to execute command.

A ' ' will appear on the Nursing Care Plan indicating the UOC has been 'CUSTOMIZED'.

Customize a New UOC

Clinician Menu

In Design Plan, with the cursor on the blank UOC line in the care plan, press F10 to access the top menu, select Customize.

- There are two options of customisation:
 1. Customize O/I, or
 2. Customize Outcome.
- Customize O/I is the most common option.
- Type the appropriate changes to the UOC in the UOC description (title), text, staff skill, time and frequency fields.
- F9 to execute command.

A ' ' will appear on the Nursing Care Plan indicating the UOC has been 'CUSTOMIZED'.

- **Time adjust:**

The time adjust function allows time to be added to a UOC. The time added to a Unit of Care only applies to the current shift.

As per the Operational Issues Associated with ExcelCare, the capacity for nurses to time adjust will be available either by:

- Approval in some settings to time adjust on the system directly; or
- Approval to time adjust after consultation with the ExcelCare Coordinator, or
- By logging a request for time adjust on an agreed proforma for the approval of the CNC. The CNC must either approve the time adjust and notify the ExcelCare Coordinator of the need to update the system retrospectively or discuss the request with the nurse if they believe that the request should be refused.

The ExcelCare Coordinator will provide monthly reports to CNC's on time adjust activity.

Clinician Menu

- In Design Plan, with the cursor on the UOC to be time adjusted, press F10 to access the top menu, select Time Adjust.
- Type the appropriate changes to the staff skill, time or frequency fields as required.
- F9 to execute command.

A [=] will appear on the Nursing Care Plan indicating the UOC has been time adjusted.

- **ACCURACY IN EXCELCARE**

Information from ExcelCare is used in relation to staffing, patient costings, quality and benchmarking. The information comes from the UOC's allocated to the care plan for each patient, therefore data integrity is vital to ensure the information used from ExcelCare is accurate.

The routine approval of patient care plans to ensure the care plan accurately reflects patient assessment is a means to ensure the integrity of data. On a larger scale it is important that UOC's are reviewed to ensure that they reflect current best practice and time.

- **Care Plan Auditing:** The user can assist to ensure accuracy within the clinical information system through care plan auditing and by ensuring that transactions are done in a timely manner reflective of actual time.

Key points for auditing, in design plan screen review:

- Patient admitted to the ward/unit has an active care plan;
- Clinical relevance of UOC's on the care plan against patient assessment - activate and deactivate UOC's as required;
 - Omission of a UOC – Activate applicable UOC;
 - Possible duplication of UOC's – deactivate duplicated UOC's and
 - Overlap of time for activation/deactivation for similar UOC's – discuss with Excelcare coordinator.

Key points for auditing projected reports:

- View/print projection reports in detail (Refer to Module 1).
- Review individual patient time against clinical assessment.
- If individual patient time does not reflect clinical assessment, review care plan in design plan screen.

- **Adhoc Auditing:** There is a range of ExcelCare audits available to promote accuracy of data entry at each health unit.
- **UOC Review/Establishment:** UOC's need to be reviewed regularly to ensure that they reflect best practice. UOC's can be reviewed either within the health unit or with a corporate focus at the DHS.
 - Corporate UOC's mean that the same UOC is used at all sites, which promotes a consistent approach to care planning and patient care.
 - There are guidelines available on the DHS Intranet site on the development of Corporate UOC's. These documents provide more detail as to how the UOC's are developed.
 - The key concepts to reviewing/developing a UOC including:
 - All relevant nurses are notified when a particular UOC is placed under review;
 - There is the ability for nurses to identify issues or comment on the changes that should be considered in altering the UOC;
 - There is the ability for nurses to comment on draft changes to the UOC as the review group considers them;
 - The UOC is based on best practice (where available);
 - Expert clinicians are involved in the review and development of UOC's;
 - Timing of UOC's requires the actual repeated timing of the O/I's and the determination of a mean time for inclusion on the UOC.

- **STAFFING TO EXCELCARE**

To understand 'staffing to ExcelCare' it is important to have an understanding of the varied types of time and how time is calculated in ExcelCare.

- **Projected time:** is the predicted number of nursing hours, for the next projection interval, inclusive of ExcelCare direct time, as indicated by UOC's on the patients nursing care plan at the time of projection and the ward indirect time.
- **Direct Time:** is the time allocated to perform care/activity by nurses that can be clearly attributed to a specific patient. These times are attached to the Observations and Interventions on individual patients nursing care plan.
 - **Embedded Time** is the time allocated which is assigned to ALL patients. Activities that are a component of specific nursing care but do not require an individual description. For example: *Reviewing ExcelCare*. The time is 'embedded' into an existing UOC that is assigned to all patients' care plans.

- **Indirect time:** represents the time allocated to perform activities by nurses, which affects all patients. This time cannot be directly attributed to an individual patient but is distributed across all current patients.

Indirect time is further divided into fixed and variable.

- **Variable Indirect Time** is the time allocated that does change with patient numbers and/or activity. For example: *Phone Calls*
- **Fixed Indirect Time** is the time allocated that does not change with patient numbers and/or activity. For example: *DD Count*
- **Unit/Ward (Station) Fixed Indirect Time** is the fixed time allocated for activities that occur whether there are patients present or not on the unit/ward.

Indirect Care time is programmed into ExcelCare for each ward and is calculated within the ExcelCare program for each ward.

Projected time is used for shift by shift staffing. The Nursing and Midwifery Shift by Shift Staffing Requirements Decision Making Tree defines the sequential decision making steps to be undertaken in priority order for the provision of staffing to meet patient care requirements. The Nursing and Midwifery Shift by Shift Staffing Requirements Decision-Making Tree is available on the DHS Intranet.

Projected time differs to the Nursing Hours per Patient Day (NHPPD) report. The monthly NHPPD report, produced by the System Coordinator, provides retrospective data including Required NHPPD and Actual NHPPD. The NHPPD figures are reported to the Department of Human Services (DHS) on a fortnightly basis

- **Required Clinical NHPPD:** Number of nursing hours inclusive of ExcelCare direct time, as indicated by UOC's on patients nursing care plan, and the pro-rated indirect time required by all patients in a 24-hour period.
- **Actual Clinical NHPPD:** Includes all Paid Productive time, worked and paid type codes (WP and OP), inclusive of overtime.

- **PATIENT COSTINGS**

- Trendstar monthly extracts are provided to contribute to the financial perspective of patient care in the Metropolitan health units. The nursing costs associated with patient care are taken from ExcelCare.

- **TROUBLESHOOTING:** The following list of 'troubleshooting issues' is not comprehensive of all possible issues. Select common site problems as required for discussion of 'troubleshooting'. These may include any of the following examples:

- **Shutting Down and Restarting**

- Instructions

- **Message 'Cannot find the working folder or directory'**

- Solution: Shut down pc and restart

- **Message 'MRN xx... is currently locked by another node – try again'**

- Solution: Ensure no-one else is accessing the patient record
Wait 10 minutes
Shut down all ExcelCare pc's on the ward, and restart

- **Unable to type in numbers**

- Solution: Press the Num Lock key or
Use the numbers above the letters on the keyboard

- **ExcelCare appearing not to respond**

- Solution: Press Ctrl-Alt-Delete
Shut down and restart the pc

- **Message 'Unable to save screen: The following UOC line(s) have required field(s) which are blank'**
 - Solution: Enter UOC Activation time

- **Message 'Station 9999 is for system administration only'**
 - Solution: Close ExcelCare
Shut down and restart the pc

- **Message 'ExcelCare live environment has already been started. Press any key to continue'**
 - Solution: Locate open Excelcare session on toolbar
Close all open multiple sessions

- **Patients 'Missing from ExcelCare' or issues with transfer and discharge**
 - Solution: Check PMI system
Check ward is on correct shift

- **Message 'Cannot find the working folder for this program'**
 - Solution: Shut down and restart the pc