

Enhancement Name:	Capacity Manager Tool (CMT)	Updated: July 31, 2006 Version 1.2
Requestor(s):	Nursing Interschool-Interagency Committee (NIIC)	
Enhancement Description:	<p>The CMT will encompass a set of tools to track and plan Placement Capacity at the level of Destination and then to aggregate this functionality at the level of Service, Site, Health Authority, and/or discipline. Capacity planning and building could then occur by setting equitable targets based on HA or other standards (i.e. student-to-staff ratios) and/or to match recruitment targets or projected student enrollment levels.</p> <p>The CMT would also track Capacity Utilization against total or target capacity, thereby allowing Placing Agencies to use the Tool to “find” available capacity (among units with utilization lower than target capacity) in the event of cancellations or changing student requirements.</p>	
Document Purpose:	To report on deliverables and outcomes of the CMT Project.	

Project Objectives (from PEIF Award Application)

1. Contribute to increased placement capacity by:
 - Providing standardized tools for defining and measuring capacity at the level of unit, service, and site, both within and across HA’s
 - Tracking utilization (actual placement activity against capacity)
 - Providing tools for Placing Agencies and the NIIC to “find” available capacity in order to assist with program growth, curriculum changes, program planning, and replacement of cancelled placements or declined requests;
2. Provide a foundation for receiving destinations to identify “best times”, leading in future to opportunities for students and instructors to provide feedback on these ratings as part of their placement evaluation;
3. Ensure sustainability and cost effectiveness of the CMT and processes that support it;
4. Involve key stakeholders and facilitate collaboration on capacity building;
5. Support evidence-based quality teaching and learning.

CMT Functionality

The CMT module delivers the following key functions:

- **Enhanced Destination Profile** with five levels of information including:
 - **Profile/Schedule** – destination address (if different from site address), program description, populations served, days/hours of operation, and upcoming closures;
 - **Typical Staffing** – ability to define staffing types by discipline/subdiscipline, shifts worked, and ability to accept students;

- **Contacts** – expanded list of destination contacts including multiple roles such as unit manager, educator, unit clerk, and backup coordinator
 - **Placement Capacity** – a summary of “target” capacity information¹ (individual and group placements) by discipline, including a schedule of available group shifts and/or individual spaces by term, developed through completion of a user-friendly wizard (see below);
 - **Capacity Utilization** – an instant summary of utilization (accepted and confirmed placements) against target capacity.
- An **online alert** to Placing Agencies if the group size requested (via the Groups Worksheet) exceeds the maximum allowed for the specified destination. The alert displays group size as bold red font, but does not prevent the group request from being sent as currently configured.
 - **Online reporting** via the Capacity Utilization screen, which graphically summarizes historical utilization for planning or comparison purposes, or can be filtered to an upcoming term for the purpose of “finding” available shifts or spaces.
 - **Prototype queries** to support data analysis and research on capacity distribution, total theoretical² and target capacity, reasons for not accepting certain disciplines and/or placement types, and capacity utilization by unit/destination, service, site or across agencies. Once users have an opportunity to refine the data presented and to define their regular reporting needs, the queries can be packaged into pre-defined reports and/or reporting wizards to allow users to run their own reports.

Capacity Wizard

The placement Capacity Wizard is a standardized, user friendly tool for collecting data that builds a placement capacity profile for a unit/discipline. Already, two BC health regions have launched projects to methodically collect this data on a one-time basis, thereby establishing a “baseline” of capacity information that can be maintained with relative ease through annual update of the wizard.

A typical wizard screen asks one or more questions and provides areas to provide comments or reasons (e.g. as to why a unit cannot accommodate group placements).

At this time, reasons are required if a unit is unable to accommodate group or individual placements, or if the schedule for a unit is

7x24 but the respondent indicates that only day shifts are accepted.

Group Placement Capacity Wizard

< Previous Next > Cancel

Reason for Not Accommodating Groups

Please provide a reason why Groups can not be accommodated

Reason: Patient population - not suitable

Comment if Other: Insert explanation here

¹ Target capacity was defined in the *CMT Discussion Paper* (November 30, 2005) as a “practical” capacity level to be set based on standards or agency objectives (such as xx preceptorships per nursing FTE or bed), and potentially encompassing other criteria such as staff and learner satisfaction.

² Theoretical capacity was defined as available shifts x student capacity/shift on all days of operation - e.g. - 1 group of size 8, x day and evening shifts, x 365 days/year


Upon completion of all Capacity Wizard questions, the capacity profile is assembled and presented immediately in tabular format. Multiple capacity profiles can be viewed by changing filters for Discipline or placement type.


Destination Profile


Name: 5North **Service(s):** Medicine **Site:** RCHosp
Last Updated: May 31/06

Categories: [Profile/Schedule](#) [Typical Staffing](#) [Placement Capacity](#)
 [Contacts](#) [Capacity Utilization](#)

Placement Capacity

Maximum Learners to be Accommodated: Unknown 
due to space, patient/client population and other considerations

Discipline: Nursing (I,G)  **View:** Individual Group **Refresh View**

Placement Type: Instructor-Led Groups (*max Group Size = 4 students*) 
 Minimum Program Year: n/a

Shift	Groups Accepted							Max Shifts/Week
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Days - 8	✓	✓	✓	✓	✓	✓	✓	7
Eves - 8	✓	✓	✓	✓	✓	✓	✓	7
Shifts/Day	2	2	2	2	2	2	2	14
Days - 12	✓	✓	✓	✓	✓	✓	✓	7
Shifts/Day	1	1	1	1	1	1	1	7

The Destination Profile and Capacity summary tables are readily available from a Destination hyperlink on several HSPnet screens:

Placing Agencies:

- Enrollment, Group or Individual Worksheets - when entering student preferences or when creating new requests,



All Users:

- Groups Overlap Worksheet (new) – lists all units with Conflict flags;
- Outbox Details;

In addition, a full set of Destination Profiles is available for any Site from the Setup/Lookup screen under Maintenance.

























Destination Master List Maintenance

Current View

Agency: FHA  **Site:** DeltaHosp  Show Deleted Master Dests **Refresh View**

Use this screen to add or inactivate Destinations at a Site, or to edit an existing Destination name if it requires correction. Note that editing an existing Destination name below will affect all current and past placements that reference that Destination.

If you want to change a Destination's name or Service effective on a certain date (without impacting current/past placements) see [Help](#)

Name	Short Name	Used by Service(s) (* = non-HSPnet user)			
Extended Care Unit	ECU	ResidCare			
Emergency	Emerg	Emerg			
Medical/Subacute Unit	Med/Subac	Medicine			
Operating Room	OR	SurgServ			
Post Anesthetic Care Unit	PACU	SurgServ			
Rehab Assistant - General	RA/Gen	Physio*			
Surgical Day Care	SDC	SurgServ			

Capacity Utilization Screen

Once a wizard is successfully completed, the target capacity information is then used to display an interactive summary of utilization against that capacity, whether for a past period or for upcoming placements.

For instructor-led groups, the colour-coded display communicates the availability of shifts by day of the week.

In this example, utilization on the unit is:

- Mon, Tue and Weds for the weeks starting Sep 18 to Nov 20;
- Days and evenings (red font) on Tues/Weds for 9 weeks of the term.

The rightmost column shows non-group utilization (i.e. preceptorships), with 1 student on the unit for 4 weeks and 2 students for 8 weeks.

This screen has great potential for displaying group availability for multiple units or even across sites (see *Next Steps and Recommendations*).

Destination Profile				
Name: D5 Service(s): SurgeryIP Site: TOHCivic				
Last Updated: May 10/06				
Categories: <input checked="" type="checkbox"/> Profile/Schedule <input checked="" type="checkbox"/> Typical Staffing <input checked="" type="checkbox"/> Placement Capacity				
<input checked="" type="checkbox"/> Contacts <input checked="" type="checkbox"/> Capacity Utilization				
Capacity Utilization				
Term: Fall		Year: 2006		Refresh View
Week (starting Aug 28/06)	Group Utilization			Non-Group Utilization
	Days	Day Shift	Eve Shift	Students
Aug 28	MTWRF SU	0	0	0
Sep 4	MTWRF SU	0	0	0
Sep 11	MTWRF SU	2	0	0
Sep 18	MTWRF SU	3	2	0
Sep 25	MTWRF SU	3	2	1
Oct 2	MTWRF SU	3	2	1
Oct 9	MTWRF SU	3	2	1
Oct 16	MTWRF SU	3	2	1
Oct 23	MTWRF SU	2	0	2
Oct 30	MTWRF SU	3	2	2
Nov 6	MTWRF SU	3	2	2
Nov 13	MTWRF SU	3	2	2
Nov 20	MTWRF SU	3	2	2
Nov 27	MTWRF SU	2	0	2
Dec 4	MTWRF SU	0	0	2
Dec 11	MTWRF SU	0	0	2
Dec 18	MTWRF SU	0	0	0
Dec 25	MTWRF SU	0	0	0

Key: Red = Day & Eve (or 2+ groups) Blue = Day or Eve (1 group) Green = no groups = Dest. not available
Includes all statuses except Declined and Cancelled.

Capacity and Utilization Queries

Prototype queries are available for testing and refinement over the coming months as Receiving Agencies complete the Placement Capacity profiles and are ready to review results. The prototype queries will answer a wide range of questions such as:

- What is the capacity for nursing preceptorships
 - at my agency / site
 - for all inpatient surgical units in my health authority
 - across health authorities (e.g. BC Lower Mainland)
- What are the utilization rates for instructor led groups
 - on weekdays versus weekends
 - on day versus evening shifts
- What percentage of units that operate on a 7x24 basis are unable to accommodate placements on the evening shift? On weekends? For what reasons?
- What reasons are given for units that are unable to accommodate instructor led groups?

Capacity Summary Report

The Destination Profile Summary report (available at this time to Receiving Coordinators only) has been expanded to include a printout of Capacity Summary information. In addition, the Destination Profile Summary reporting interface has been enhanced to allow users to select one or all levels of the profile. The sample report below shows multiple Capacity summaries for a single nursing unit.

Destination Profile										
Name: 3North		Site: Royal Columbian Hospital								
Last Updated: Jun 23/08										
Placement Capacity										
Maximum Learners to be Accommodated: 7 due to space, patient/client population, and other considerations										
Discipline: Administration										
Placement Type: Individual Placements (e.g. preceptorships, fieldwork, projects)										
Subdiscipline	Max. Spaces	Prog. Yr. (min)	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Shifts Accommodated 8 hrs 12 hrs Other
Unit Clerk	Win: 1 Spr: 1 Fall: 1	Any	√	√	√	√	√	√	√	Days Eves
Discipline: Nursing										
Placement Type: Individual Placements (e.g. preceptorships, fieldwork, projects)										
Subdiscipline	Max. Spaces	Prog. Yr. (min)	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Shifts Accommodated 8 hrs 12 hrs Other
Licensed/Registered Practical	This subdiscipline does not accommodate Individual Placements. Reason: Not Applicable to this Discipline Comments: No LPN's on this unit.									
Registered Nurse	Win: 6 Spr: 6 Fall: 6	3	√	√	√	√	√	√	√	Days Nights
Placement Type: Instructor-Led Groups (max Group Size = 6 students)										
Minimum Program Year: 3										
Shift	Groups Accepted									Max Shifts/Week
Days - 8	√	√	√	√	√	√	√	√	√	7
Eves - 8	√	√	√	√	√	√	√	√	√	7
Shifts/Day	2	2	2	2	2	2	2	2	2	14
Days - 12	√	√	√	√	√	√	√	√	√	7
Shifts/Day	1	1	1	1	1	1	1	1	1	7

CMT Evaluation

The Evaluation Plan for the CMT Project encompasses the following activities:

Indicator and Proposed Measures	Proposed Tool	Evaluation Status
Consensus on the tool's purpose and potential value	<ul style="list-style-type: none"> Discussion Paper and feedback from BC and AB users 	<ul style="list-style-type: none"> Distributed and finalized in November, 2005
	<ul style="list-style-type: none"> Post-CMT User satisfaction survey 	<ul style="list-style-type: none"> Published via HSPnet website in June, 2006.

Indicator and Proposed Measures	Proposed Tool	Evaluation Status
Potential and realized contribution to capacity building <ul style="list-style-type: none"> • Perceived value of the Capacity and Utilization data for capacity building • Perceived value of the CMT for capacity finding 	<ul style="list-style-type: none"> • Post-CMT User satisfaction survey • Annual HSPnet User Satisfaction Survey – supplementary survey for CMT users 	<ul style="list-style-type: none"> • See above • Addendum to annual User Satisfaction Survey (September 2006) to be made available for CMT module users
Potential and/or realized contribution to learning quality	<ul style="list-style-type: none"> • Post-CMT User satisfaction survey 	<ul style="list-style-type: none"> • See above
Sustainability <ul style="list-style-type: none"> • (future) adoption rates • (future) timeliness of CMT updates • (future) comparison of utilization against targets 	<ul style="list-style-type: none"> • Report on CMT use by Discipline/Sub-discipline • Aging reports on CMT updates • Analysis of Capacity Utilization against targets 	<ul style="list-style-type: none"> • CMT adoption rates to be reported to NIIC on a bi-annual basis • CMT-related indicators to be encompassed into HSPnet-BC Management Plan (committee to meet for the first time in Fall 2006)
Ease of Use <ul style="list-style-type: none"> • Ease of use ratings (CMT, reports) 	<ul style="list-style-type: none"> • Post-CMT User Satisfaction Survey • Course Evaluations (CMT launch) • Focus groups 	<ul style="list-style-type: none"> • See above • CMT Workshop held in March 2006 and attended by six Receiving Coordinators, and was demonstrated at the BC User Group Meeting on March 8th

The following evaluation results and reports will be presented at the upcoming BCAHC *Practice Makes Perfect* Conference in Fall 2007:

- Results of CMT Pilot Survey (to be distributed to NIIC members, CMT Working Group members, and existing HSPnet users (Placing and Receiving Coordinators))
- Results of HSPnet User Satisfaction Survey – components relevant to CMT
- Reporting and Analysis:
 - CMT Adoption rates (% of destination profiles entered; % of entered profiles with Capacity summaries)
 - Summary of Target Capacity Rates by nursing Sub-Discipline

Next Steps and Recommendations

The following next steps are recommended to increase awareness and effectiveness of CMT functionality and benefits:

1. Evaluation Plan – complete evaluation and reporting activities outlined above, including:
 - Reporting results to BCAHC conference in Fall 2007
 - Introducing semi-annual report to NIIC on CMT adoption and review rates, summary Capacity data
2. Reporting & Data Analysis – Establish a CMT Reports Working Group to design and test key reports to be made available to users as Pre-Defined reports and/or a CMT Wizard.

3. Research – establish a team interested in research involving CMT data; seek funding and support for the work and publish results.
4. Ongoing Enhancement
 - Additional warnings and alerts – as CMT users become familiar with the tool, consider introduction of alerts to warn if requests are inconsistent with Destination profiles – e.g. sub-disciplines or Program year accepted, shifts/weekends;
 - Allow entry of site-defined reminder dates for Profile update; initiate email reminders to the Service Receiving Coordinator and/or Destination Coordinator;
 - Site Availability “Finder” Screen – consider ways to summarize the Utilization screen across Services or Sites, thereby providing a region-wide snapshot of available capacity.