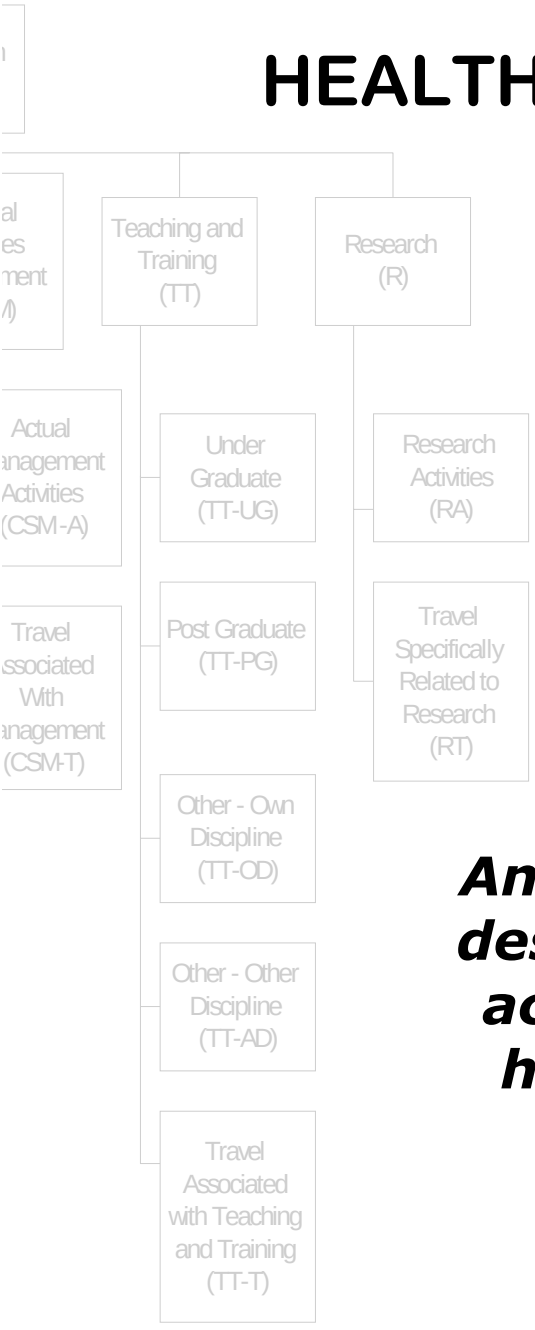
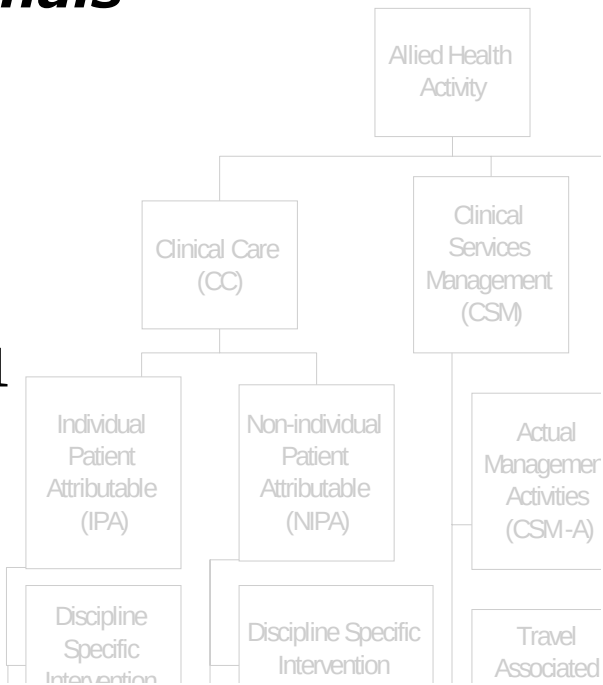
National Allied Health Casemix Committee

HEALTH ACTIVITY HIERARCHY

VERSION 1.1



An Australian standard describing the range of activities provided by health professionals



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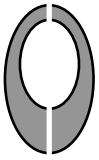

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RMIT BUSINESS

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CONTENTS

PART ONE: Health Services Management Overview

A well-managed health sector emphasises efficiency, competition and accountability within the context of evidence-based practice and quality improvement.

Increasingly, all health service providers are being asked to justify their costs in terms of the outcomes they achieve. Practitioners need to be able to respond to the challenges presented by these changes in the language of the new management paradigm.

For many years, primary medical care has been funded according to a system of "occasions of service" through the Medicare system.

Australian governments at the national and state/territory level have moved to output based (casemix) funding as the primary funding mechanism for acute care hospitals. The DRG system is the primary classification mechanism.

Other care delivery settings, such as community health, rehabilitation and psychiatric services are also experiencing the demands to justify costs in terms of outputs and outcomes – although consensus on common casemix classifications is not as tight as within the acute hospital environment

Many professionals collect a variety of workload and output data but these data are institution-specific, variously defined and infrequently standardised. They, therefore, do not permit comparison between regions, states or even across like organisations.

To address these shortfalls, the NAHCC (with the then Department of Health and Family Services funding) developed the Australian Allied Health Classification System (AAHCS).

The AAHCS was a major achievement for allied health professions, which offered:

- a common language to communicate key aspects of the business of allied health professionals to in-house senior management and government agencies
- a standardised system for allied health professionals to compare their clinical practices
- a rich database for research into allied health activities, interventions and outcomes
- a chance to benchmark services across organisations using Australian data .

The Health Activity Hierarchy supercedes the AAHCS.

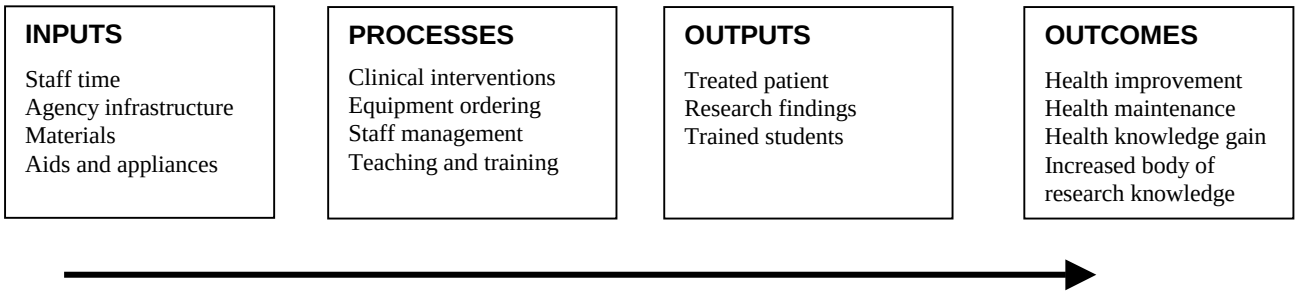
How do managers conceptualise patient care?

Health service managers are increasingly linking inputs (eg staff and materials) to outputs (treated patients) and outcomes (health improvement).

While many allied health professionals have comprehensive systems in place to capture the input data, little is systematically available to measure outputs.

The following diagram conceptualises the way that health service managers now view the activities within their organisations.

The inputs to outcomes continuum actually has four discreet elements.



What data elements are necessary in today's health care environment?

To succeed in the contemporary health environment, each of the following elements needs careful attention:

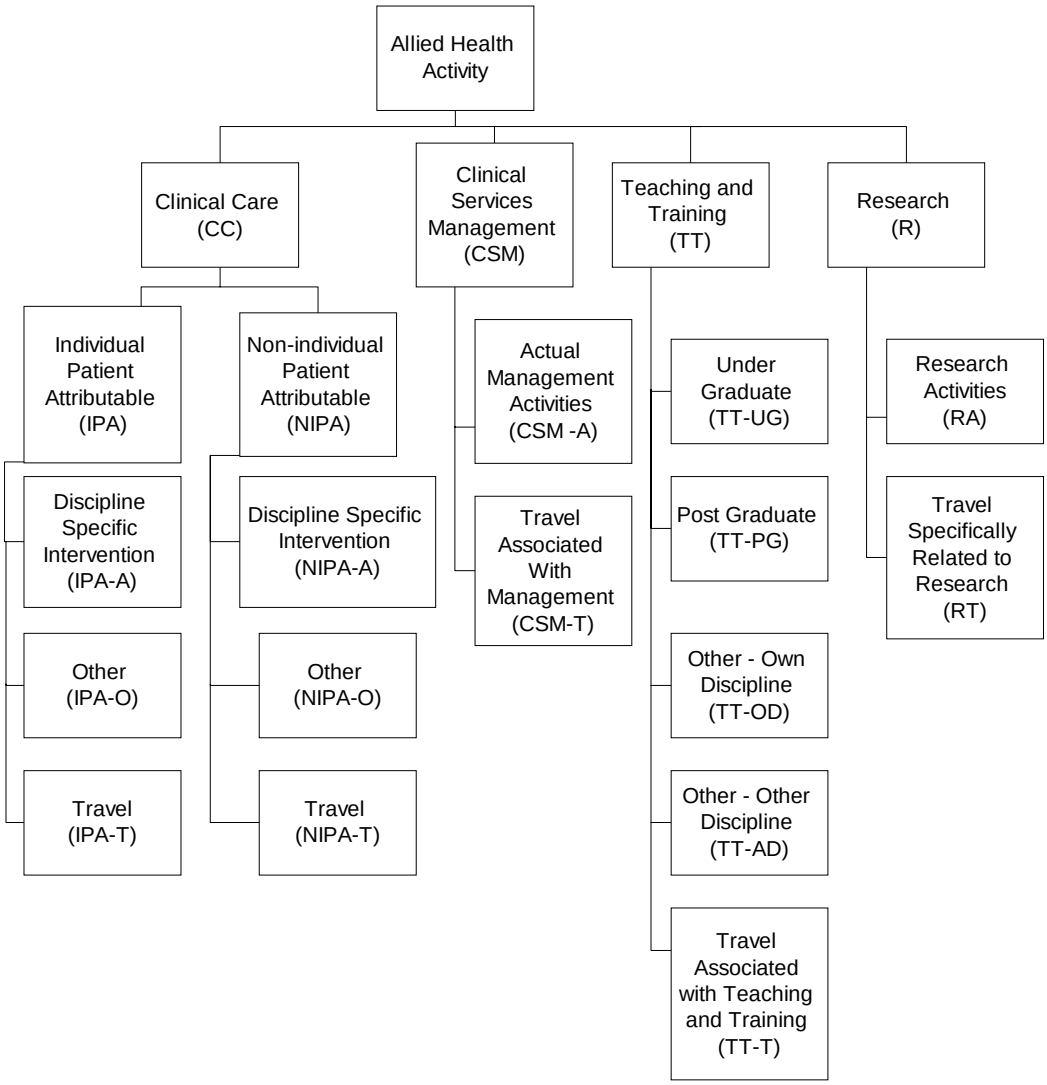
- defining and measuring service activity
- costing and pricing activities
- analysing best practice (efficiency / effectiveness)
- conducting research
- effectively competing with alternative providers in the health sector
- workload management / staff accountability / comparisons
- benchmarking exercises
- providing quality and equity

To be able to do these things certain systems and information must be in place.
The following table details what is needed in the acute hospital setting.

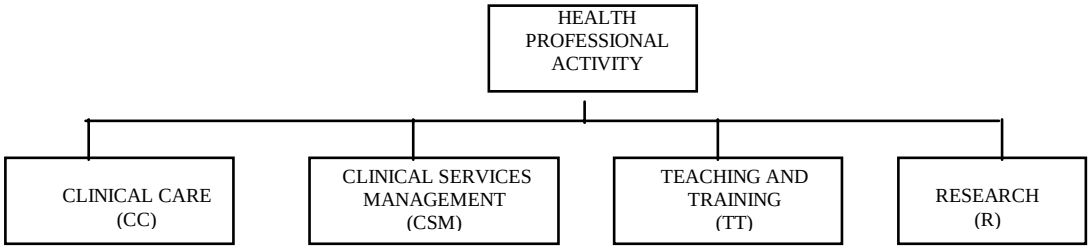
Data systems required for successful management of Allied Health services in acute care facilities

System or information required	Product ✔ available ✕ not developed ? under construction	Source / Comment on availability
Description of provider activities ▪ Activity performed ▪ Reason for intervention	✔ The ICD-10-AM codeset	NCCH
	✔ Indicators for Intervention	NAHCC
Description of client characteristics • diagnostic issues • demography • referral source • inpatient / ambulatory split	✔ NAHCC Allied Health Minimum Data Set	This document
	✔ National data dictionary	AIHW
Description of provider / setting characteristics • Provider ID • service type	✔ NAHCC Allied Health Minimum Data Set	This document
	✔ National data dictionary	AIHW
Data collection and reporting mechanisms • user-friendly software • manual and computerised • cost-effective	✔ National Hospitals Cost Data Collection ✔ Combo / Transition / Trendstar etc	CDHAC
	✔ Software developers and vendors	See appendix
Activity Quantification • time based • frequency based	✔ National Hospitals Cost Data Collection	CDHAC
	✔ Health Activity Hierarchy	NAHCC
	? Allied Health Service Weights	NAHCC
Meaningful data utilisation • clinical outputs / products • workload / productivity analysis • casemix analysis	✔ National Hospital Morbidity Data set	AIHW
	? Indicators for Intervention	NAHCC – partially completed
Professional and Industry Standards • staffing needs • clinical skills • standards of practice • resource utilisation • productivity • reporting standards		
Outcome measures	✔ National framework for Performance Indicator reporting	CDHAC / NHPC
	✕ Allied Health PI's,	NAHCC
	? AUSTOM indicators	LaTrobe University
	✔ Clinical Indicators	ACHS / State & Territory Health authorities Local agencies

The Health Activity Classification



First Tier of the Hierarchy



Activity	Definition
Clinical Care	Activities which provide a service to an individual, group or community to influence health status.
Clinical Services Management	Professional and management activities which support and are essential to clinical care
Teaching and Training	**Formal** teaching or training activities which relate to the **imparting** of knowledge, skills and clinical competency to undergraduate and post graduate students, practitioners in own discipline, and other practitioners as part of a structured program. *It is important to avoid confusion between supervision and formal instruction. The definition is inclusive of interactions with training institutions and students and the preparation for and delivery of structured activities such as inservices, lectures, presentations and tutorials. It does not include one-to-one staff supervision, informal ad hoc sessions with staff or professional development*
Research	Activities undertaken to advance the knowledge of the delivery of care to an individual, group or community. Research is limited to activities that lead to and follow formal approval of the project by a research committee or equivalent body. *There is a need to distinguish between activities such as a literature review and a formally constructed research project approved by a research committee or equivalent body.*

Client or Patient Definition

(The terms client and patient are used interchangeably as usage is dependent on the clinical setting.)

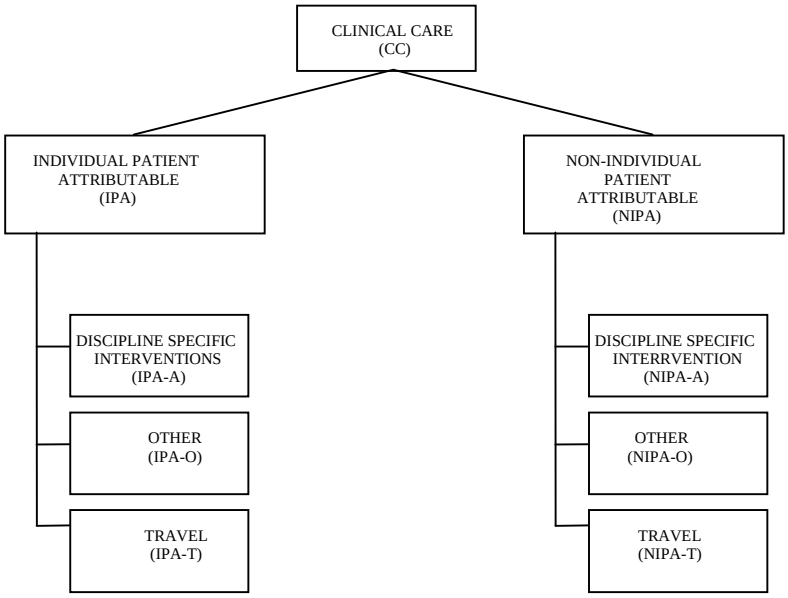
A person (or group of people) who:

1. directly receives a service on an inpatient, outpatient, community-based, private practice or domiciliary basis
2. a relative, friend or carer of a 'primary' client (as defined in point 1) who also receives a service related to the care of the 'primary' client.

Clinical Care

This is the only branch of the hierarchy which has highly developed sub branches.
At the tertiary level (IPA and NIPA) the hierarchy mirrors the ICD-10-AM codeset.
From the second edition of ICD-10-AM the codes have become provider neutral (in other words they no longer identify the profession / discipline providing the procedure).

The full set of ICD-10-AM codes is published by the National Centre for Classification in Health



The premise and determinations surrounding the utilisation of the classification system are that, wherever possible and practicable, an activity is to be assigned to an individual patient.

Definitions:

Individual Patient Attributable (IPA): any clinical care activities that **can** be assigned to an individual patient

- **IPA-A:** an intervention which can be directly related to a specific patient
- **IPA-O:** any other intervention which can be directly related to a specific patient (except travel); not specified in the discipline specific classification of individual patient interventions.
- **IPA-T:** which can be directly related to a specific patient.

Non-Individual Patient Attributable (**NIPA):** any clinical care activities that **cannot** be assigned to an individual patient.

- **NIPA-A:** any discipline defined intervention which cannot be directly related to a specific patient.
- **NIPA-O:** any other intervention which cannot be directly related to a specific patient (except travel); not specified in the discipline specific classification of non-individual patient attributable interventions. (#1)
- **NIPA-T:** any travel activity associated with clinical care which cannot be directly related to a specific patient.

Discipline specific intervention: an IPA or NIPA activity that has been defined according to unique classifications developed by the profession providing the service (#2)

Applying the Classification

The classification system is based on the principles that, wherever possible:

1. An activity is to be classified as Clinical Care (CC); and
2. Within Clinical Care, an activity is to be assigned to an individual patient as far as possible.
3. Some activities involve a mix of activities such as:
   - Treating a patient and instructing a student
   - Treating a patient and collecting data for research purposes.

   The split between IPA and TT or R is that IPA time should be considered from a costing perspective. Therefore only the time that is reasonable to allocate to the patient should be put into IPA and there should be no double counting. All other time should be allocated to TT or R.

Clinical Services Management (CSM)

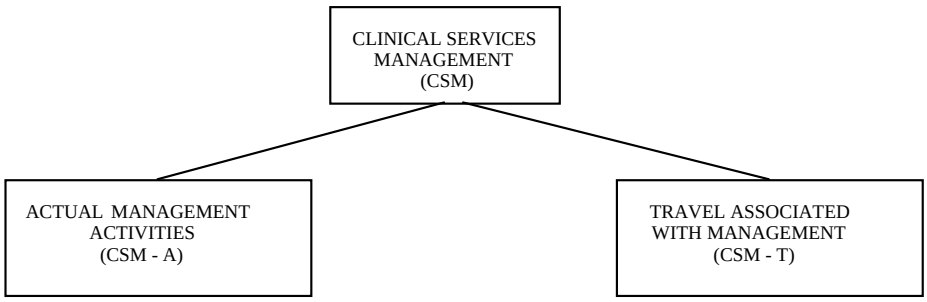
Elements

- administration generally
- staff management
- statistics gathering and reporting
- financial management
- quality activities
- representations/ consultation
- professional development
- travel for management purposes
- program evaluation
- meetings

All these activities are classified and coded as either:

CSM - A Actual clinical service management activities, or
CSM - T Travel specifically associated with clinical service management.

This split is illustrated below:

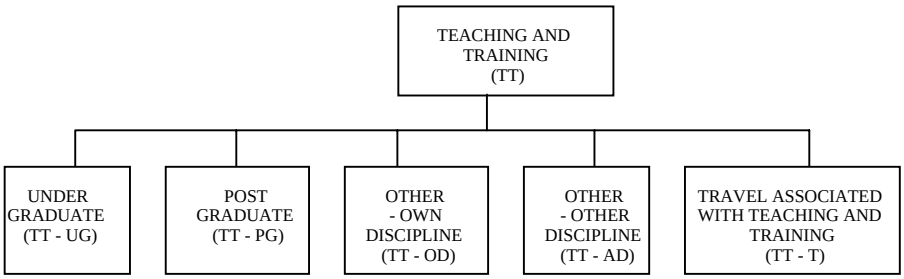


Teaching and Training

Teaching and training is the third grouping of activities at the first level and is split into five sub-categories. These are:

sub-category	activities included
TT - UG	imparting of knowledge, skills and clinical competency to undergraduate students
TT - PG	imparting of knowledge, skills and clinical competency to postgraduate students
TT - OD	imparting of knowledge, skills and clinical competency to practitioners within ones own discipline
TT - AD	imparting of knowledge, skills and clinical competency to practitioners from another discipline.
TT - T	Travel specifically associated with teaching and training activities.

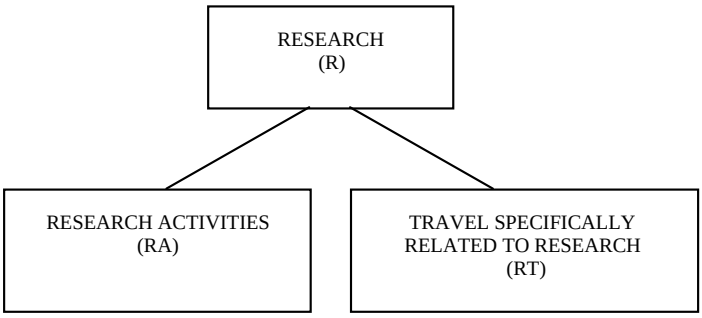
Each of the partitions includes preparation directly associated with the respective activity.



Research

Research is split into two components designated as:

R-A research activities
R-T travel specifically associated with research activities.



PART TWO: The Allied Health Minimum Data Set

Data ELEMENT	Description	Source **
Unique Client Identifier	Person Identifier unique within establishment or agency.	NHDD
Sex	The gender of the person.	NHDD
Date of Birth	The date of birth of the person.	NHDD
Indigenous Status	An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community with which he or she is associated .	NHDD
Area of Usual Residence	Geographic location of usual residence as stated by the person. The geographical location is reported using a five digit number code. The first digit is the single digit code to indicate State or Territory. The remaining four digits are numerical code for the Statistical local area within the State or Territory.	NHDD
Postcode	4-digit Postcode of area of the usual residence of the person.	
Telephone Number	The telephone number to contact the person.	
Interpreter Services	Need for interpreter services (yes/no) as perceived by the client. *Whether the interpreter service was actually provided is not relevant to this data element*	NHDD
Preferred Language	The language (including sign language) most preferred by the person for communication. *This may be a language other than English even where the person can speak fluent English.*	NHDD
Compensable Status	Any client who is entitled to the payment of, or who has been paid compensation for, damages or other benefits (including a payment in settlement of a claim for compensation, damages or other benefits) in respect of the injury, illness or disease for which he or she is receiving care and treatment, is classified as a compensable patient. *This definition excludes entitled beneficiaries (Veterans Affairs) and Defence Force personnel treated in public and private hospitals. It also excludes Motor Accidents (Compensation) Act 1979 (NT) beneficiaries treated as public patients (on first admission) in Northern Territory hospitals. On second and subsequent admissions, Territory Insurance Office patients should be counted as compensable patients.*	NHDD
Carer Availability	The carer is any person, for example, family, friend or neighbour, who is giving regular, ongoing assistance to the identified client without payment other than the pension or benefit. *This excludes formal services such as Delivered Meals or Home Help, persons arranged by formal services such as volunteers, and also excludes funded group housing or similar situations.* *Availability infers willingness and ability to undertake the caring role. In those circumstances where a potential carer is not prepared to undertake the role, or when their capacity to carry out the necessary tasks is minimal, then the client must be coded as not having a formal carer.*	NAHCC

Table continued over page

Data Element	Description	Source **
Date of Service	The date on which services are provided to the client.	
Date of Admission *(for hospital admitted patients only)*	The date on which an admitted patient commences an episode of care by one of the following processes: ▪ Formal admission is the administrative process by which a hospital records the commencement of treatment and/or care and accommodation of a patient. ▪ Statistical admission (excluding nursing homes) is the administrative process by which a patient who has been statistically separated recommences treatment and/or care and accommodation and occurs in the following circumstances: ▪ Statistical admission following leave of absence exceeding seven consecutive days for admitted patients; or ▪ Statistical admission on type change or transfer between episodes of care within the one hospital stay.	NHDD
Client Type	Whether service provided on an inpatient, sameday inpatient, outpatient, community, or other basis.	
Service Provider	Identification of staff engaged in service provision to client (either staff identification number or staffing level)	
Party Relationship	Identifies to whom services were provided: ▪ single client, new (initial visit in 12 months) ▪ single client, follow-up (2nd or subsequent visit) ▪ group ▪ carer or family ▪ community agency ▪ other, please specify	
Referral Source	Source from which the person was transferred/referred to the treating agency.	NHDD
Treatment Settings	Describes the setting in which treatment was provided: ▪ hospital ▪ school ▪ pre-school ▪ community health centre ▪ residential visit ▪ work visit ▪ other, please specify	
Indicator for Intervention	Allied Health - specific reason for intervention	NAHCC
Diagnosis	The medical diagnosis/es of the client	ICD / DRG

** NHDD - National Health Data Dictionary, NAHCC – National Allied Health Casemix Committee

PART THREE: Activity Assignment Examples

Activity	Comment	Classification
Administration		CSM
Case meetings, case consultations and ward rounds	Attribute to Clinical Care – Individual Patient Attributable (CC IPA) as far as possible. The total time involved should be distributed to the clients for whom the staff member attended the activity. For example, a staff member attends a conference taking 60 minutes which involves discussion on a total of 12 clients. Of these, the staff member was involved with 5 clients. The staff member would either allocate 12 minutes to each of the 5 clients or in proportion to time involved for each client – 15 minutes for 2 clients, 10 minutes to the other 3 clients.	IPA
	Attribute to Clinical Care – Non Individual Patient Attributable (CC-NIPA) where it is impracticable to assign activity on a proportionate basis to individual patients.	NIPA
Clinical / education products for patients	Preparation of a briefing note or submission for conceptual approval to develop a new clinical/education resource or product should be included under CSM.	CSM
	After concept approval has been obtained, the design, preparation and implementation of the product is classified as Clinical Care – Non Individual Patient Attributable (CC-NIPA). This would include activities associated with the design and development of the product such as content research and development, layout and design, printing, distribution, evaluation for reading level etc.	NIPA
	The provision of the product in the delivery of services is classified as Clinical Care. Where possible, time should be pro-rated to individual patients (CC-IPA). Where this is either not possible (details unknown) or impractical, classify as CC-NIPA.	IPA or NIPA
	Quality improvement and evaluation of the product post production are recorded as Clinical Services Management (CSM).	CSM
Clients who <u>do not attend</u> an appointment	Any activities in relation to clients who do not attend a booked appointment are assigned to CC-IPA. This includes waiting time, rescheduling an appointment, notation of records, preparation etc.	IPA
Clinical record keeping	Record keeping on clients is assigned to CC-IPA	IPA
	Record keeping on groups should be assigned to CC-IPA where practicable; otherwise assign to CC-NIPA.	NIPA
Clinical Services Management	Clinical Services Management includes general administration; staff management (recruitment, orientation, supervision, performance management etc); data collection, entry and analysis; financial management; quality activities; representation; consultation on professional or service issues; professional development; work leading up to the conceptual approval to proceed with a new service or product; evaluation of a service or product; meetings (staff meetings, team meetings, clinical unit administrative meetings, interagency meetings etc) not related to a specific client(s); projects; workload planning; travel related to these activities.	CSM
Community Development	Community development is a purposeful facilitation process in which health professional assists a community define, develop and implement its goals.	NIPA
Consultation	Consultation about a client is recorded as CC-IPA where medical record number known; assign to CC-NIPA where not known. Consultations with or about a prospective client would generally be assigned to CC-NIPA unless previously known to the service.	IPA or NIPA
	Consultation about a client group	IPA or NIPA
	Consultation about a specific community development or health promotion process	NIPA
	Consultation about a service issue such as referral criteria, a resource problem, priority setting	CSM
	Consultation about a professional matter	CSM
	Consultation on a teaching or training activity	TT
	Consultation on a research activity	R
Development, design and delivery of a new service/program to individuals, groups, communities or populations.	Preparation of a briefing note or submission, needs analysis or literature review for planning a new service should be included under CSM. This is considered to be the conceptual stage of the activity.	CSM
	After approval has been obtained, design and preparation of sessions / processes etc is classified as Clinical Care – Non Individual Patient Attributable NIPA) unless a specific client(s) is known at this stage. This would include activities associated with the design and development of specific programs such as session structure, content and research for the program, further literature review.	NIPA
Evaluation and review of programs	Review of the processes in a current intervention eg a group session in order to plan the process for the next session should be assigned to CC-IPA or CC-NIPA as per the general principle.	IPA or NIPA
	An evaluation of the program overall is considered a quality improvement activity and should be assigned to CSM.	CSM

Activity	Comment	Classification
Group services	The delivery of clinical programs to groups where it is practicable to assign a portion of the activity to individual patients, is to be classified as to Clinical Care – Individual Patient Attributable (CC-IPA). The same allocation principle as outlined for case meetings should be used.	IPA
	The delivery of clinical programs to a larger group of patients, where it is not practicable to assign the activity on a proportionate basis to individual patients, is to be classified as Clinical Care – Non-individual Patient Attributable (CC-NIPA).	NIPA
Health promotion	Health promotion activities are concerned with the prevention of disease and disability	
	Where targeting an individual or small group with known medical record numbers, attribute to CC-IPA	IPA
	Where targeting a large group or a population, attribute to CC-NIPA	NIPA
Meetings	Client related meetings (case conferences, family meetings, case consultations etc) are to be allocated to CC-IPA as far as practicable. Where this is impracticable, allocate to CC-NIPA.	IPA or NIPA
	Meetings not related to a specific client or group of clients are allocated to CSM. Examples are staff and team meetings, planning meetings, facility committee meetings, interagency/interdepartmental meetings, professional meetings, project meetings.	CSM
	Meetings on teaching and training activities are assigned to TT	TT
	Meetings on research activities are assigned to R	R
Phone calls, correspondence, emails or other forms of communication	The delivery of any kind of clinical care to a particular client (or to make clinical appointments/ arrangements for delivery of care) is classified as Clinical Care – Individual Patient Attributable (CC- IPA).	IPA
	The provision of general service information, or transactions related to clinical equipment or supplies not specific to a client, classify as NIPA.	NIPA
	Where associated with administrative purposes, such as arranging meetings, non-clinical appointments or ordering administrative supplies, classify as Clinical Services Management (CSM).	CSM
	Associated with teaching and training activities	TT
	Associated with research activities	R
Preparation Time	Preparation activities immediately prior to and after an individual or group activity (such as setting up the room, recording notes on the session, pack up etc.) should be classified as IPA where possible and NIPA where distribution to individual clients is not viable.	IPA or NIPA
	Preparation time associated with the delivery of a formal teaching and training activity is assigned to TT.	TT
Professional development	Attending inservices, lectures, seminars and conferences or any other means of **receiving teaching and training** is professional development and is classified as Clinical Services Management. Includes journal reading, journal clubs, implementation of the staff member's professional development plan etc.	CSM
Quality improvement activities		CSM
Research and Treatment	Where a single health professional is involved in treatment which is also associated with a research activity, the principle of classifying activities as Clinical Care – Individual Patient Attributable (CC-IPA) is to be adopted. If this takes a longer time than usual, the additional time only is classified as Research (R).	IPA or IPA and R
	Where a single health professional is involved in treatment which is also associated with a research activity and specific clients cannot be identified or it is impractical to do so, classify activity as CC-NIPA. If this takes a longer time than usual, the additional time only is classified as Research (R).	NIPA or NIPA and R
	Where more than one health professional is involved in an activity which would normally only require one clinician and this involves services to patients and research activity, the principal undertaking the research is to record the activity as Research and the other staff member is to record the activity as either CC-IPA or CC-NIPA.	R and IPA/NIPA
	Other activities such as documenting and analysing observations, writing research reports, data analysis etc are to be classified as Research (R).	R

Activity	Comment	Classification
Student and Supervisor Activity (The scope of data collection in relation to activities carried out by students is limited to Clinical Care activities.)	Where a student is treating a patient without a supervisor present, all treatment time should be entered into IPA.	IPA
	Where the patient would normally need to be treated by two people and a student and staff member are treating the patient together, both the student and supervisor should enter time as CC-IPA	IPA
	Where the student is treating the patient unaided with the supervisor observing, all student time should be entered into IPA and supervisor time into TT	IPA, TT
	Where the supervisor is treating a patient and a student is observing, the supervisor enters time that they would have taken to treat patient to IPA. Any additional time taken due to need to give explanation to student etc (slow down time) should be entered into TT.	IPA and TT
	For the supervisor's activities associated with students not involving patient treatment, classify to teaching and training. This includes liaison with the tertiary institution, preparation time, supervisory time, reporting and feedback, travel.	TT
Submissions	Preparation of a submission on the concept of a new service or product should be included under CSM.	CSM
Supervision of staff	Supervision in relation to an individual patient or number of patients should be recorded by the supervisor and supervisee as Clinical Care – Individual Patient Attributable (CC-IPA).	IPA
Supervision of staff (cont)	If it is impracticable to assign to individual patients, classify as NIPA	NIPA
	Supervision on a general matter unrelated to a specific patient or group of patients should be classified to Clinical Services Management (CSM) by the supervisor and supervisee. This includes workload issues, discussion of staff development matters, consideration of strategies in relation to interactions with other health professionals, training on allied health statistics system etc.	CSM
	Supervision in relation to group activities should be classified by the supervisor and supervisee as Clinical Care – Individual Patient Attributable (CC-IPA) as far as possible. If it is impracticable to assign the supervision of staff in relation to a group of patients to individual patients, classify this activity as NIPA	IPA or NIPA
Teaching and training – provision of	Preparation and delivery of formal inservices, lectures, tutorials or seminars is assigned to TT.	TT
Teaching and training – receipt of	This is recorded as Clinical Services Management (CSM) as this is deemed professional development**.**	CSM
Travel	Assign travel to the respective first tier activity which constitutes the primary reason undertaking travel ie Clinical Care (IPA as far as possible, otherwise NIPA), Clinical Services Management, Teaching and Training or Research.	IPA, NIPA, CSM, TT or R

PART FOUR: Applying Data to Service Management

Define the vision or your department and desired service paradigm

Vision

A vision is a broad, almost idealistic statement of overall intent for the organisation

Every health facility manager will have a vision for how s/he wants the organisation to operate.
A good manager sends this vision to all others in the organisation – and beyond, to key stakeholders.

1. Applying the vision to your service / department

   You must identify the organisational vision before you can create a complementary vision for your own service. Once this is clear, the following stepwise process may be adopted to improve your service management.

2. Undertake a stakeholder analysis

   - You
   - Your customers / consumers / patients / clients
   - Your employees
   - Your employer
   - The state / territory government and its agencies:
   - Funding agencies
   - Purchasing agencies
   - Regulatory agencies
   - The Commonwealth government and its agencies
   - Accreditation bodies
   - Professional associations / unions

3. Identify the key data elements

   Health care organisations collect a wealth of data on all aspects of service.

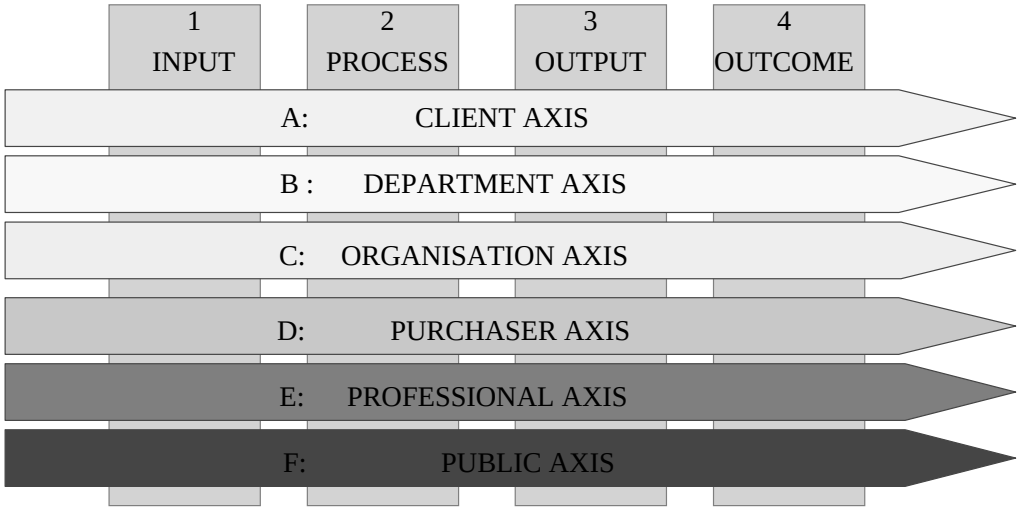
Think about the data elements in terms of how they intersect on the following grid.
The INPUT PROCESS OUTPUT and OUTCOME columns represent a model of work flow for your service.
The AXES A to F represent you key stakeholders.
Where a column and an axis intersect you should decide if this represents a key data collection point.

For example, the intersection of Client axis with Outcome (4A) is clearly a vital data element – the measurement of outcome for clients / patients.
Similarly 3C (Output from Organisational perspective) is an essential reporting element to the organization from your department or service.

The actual data that you gather at these intersecting points will depend on the type of service offered, the availability of data models and your capacity to collect.

Data streams that are important to you and your vision will vary, but almost universally will include the following:

- Client throughput (A3)
- Type and number of "interventions" provided A2)
- Staff profiles (B1)
- Incident reporting A4, B4)
- Quality improvement data A4, B4, C4, D4, E4, F4)
- Financial data (D1, D2, D3)



4. Create a performance model

   Having identified the relevant data elements, these should now be built into a performance-reporting model.

	INPUT	**PROCESS**	**OUTPUT**	**OUTCOME**
Patient axis				
Department axis				
Organisation axis				
Purchaser axis				
Profession axis				
Public axis				

5. Maintain and periodically evaluate your performance. Continually check your alignment with the organisational vision and periodically repeat your stakeholder analysis