

Shared Care Documentation

AHHC/CD Demonstration

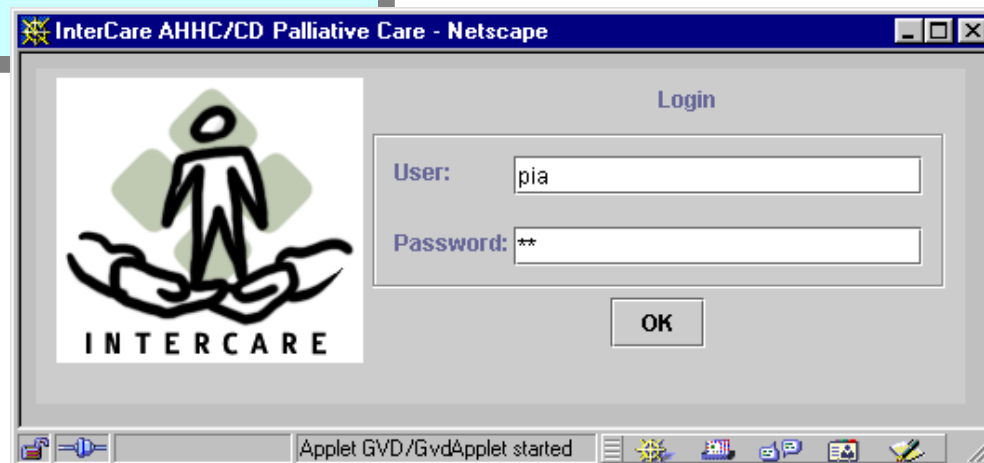


- Advanced Home Healthcare (AHHC) Application:
 - An application built on top of the CD component to support the needs of a home healthcare cooperating situation - the Palliative unit, Stockholm Nort-East and Östermalm's Home service unit.
- Care Documentation (CD) component:
 - Interoperates with InterCare components EM (Enterprise Manager) and IACS (Information Access Control Service)
 - Generic – may be adjusted to the needs of different healthcare professional categories and units by means of classifications
 - Background reference models: CEN/HISA and NHS/CBS

Starting up

- User authentication
 - Pia logs on and enters here user-id and password.
 - Enterprise Manager, which keeps the id:s and the passwords, is consulted and says OK

Nurse Pia
at Palliative unit



- Pia works for the ASiH-Nord sub-unit and as nurse she documents under the Nursing category. This kind of information is derived from the Enterprise Manager, for the documentation tool to be set in the correct start position.
- After clicking the *Patients* button, the patients which belong to ASiH-Nord are displayed.

Patients

The screenshot shows the InterCare software interface. At the top, there is a menu bar with 'File', 'Edit', 'Goto', and 'Help'. Below the menu bar is a toolbar with buttons for 'Patients', 'Referral In', 'Care Plan', 'Documentation', and 'Search and Report'. To the right of these buttons are two dropdown menus: 'Unit: ASiH-Nord' and 'Category: Nursing'. Below the toolbar is a section for 'Patient Information' showing 'Patient: 101112-1234 Kalle Kula' and a red 'NB!' button. The main area is titled 'Patients' and contains a table with four columns: 'Person Id', 'Name', 'Admission Time', and 'Unit'.

Person Id	Name	Admission Time	Unit
111111-1111	Agda Andersson	2000-09-23 16:00	ASiH-Nord
101112-1234	Kalle Kula	2000-09-03 12:00	ASiH-Nord
100322-6643	Lisa Krank	2000-09-21 16:00	ASiH-Nord
111213-4321	Inge Frisk	2000-09-22 15:00	ASiH-Nord

- The patient that Pia wants to see is selected in the list of patients, and is made the current patient.
- Pia has just made a visit to this patient's home and wants to document her observations. She presses the *Documentation* button.

Documenting

- The existing nursing documentation about this patient is displayed in time sequence.
- Pia presses *New* to enter a new note and fills in the dialog with administrative details about this contact: event time, start- and end-time for the contact, that is was a planned home visit, etc.
- When finished she presses the *OK* button to proceed.

ion Search and Report Unit: **ASiH-Nord** Category: **Nursing**

1234 Kalle Kula **NB!**

Nurs.status Med.info Nurs.diagnosis Nurs.goals Nurs.actions Nurs.results Nurs.msgs Nurs.epicrisis

General note Nursing
Home visit: 2000-09-03 13:00 - 13:30, Unpla
Responsible: Pia Snäll/PS, chef.ssk
Documentation time: 2000-10-03 13:23
Patient calls due to pain. VAS 5.

New Note

Patient: 101112-1234 Kalle Kula
Unit: ASiH-Nord
Category: Nursing
Responsible: Pia Snäll/PS, chef.ssk

Date: 2000-09-09 Time: 13:00 Note Type: General note

Contact Information
Type: Home visit Role: None

Contact Time Planning Level
From: 2000-09-09 13:00 ☒ Planned
To: 2000-09-09 13:20 ☐ Unplanned

Cancel OK

☒ 2000-09-06 13:29
☐ Nurs.status Pain/Sensory impression

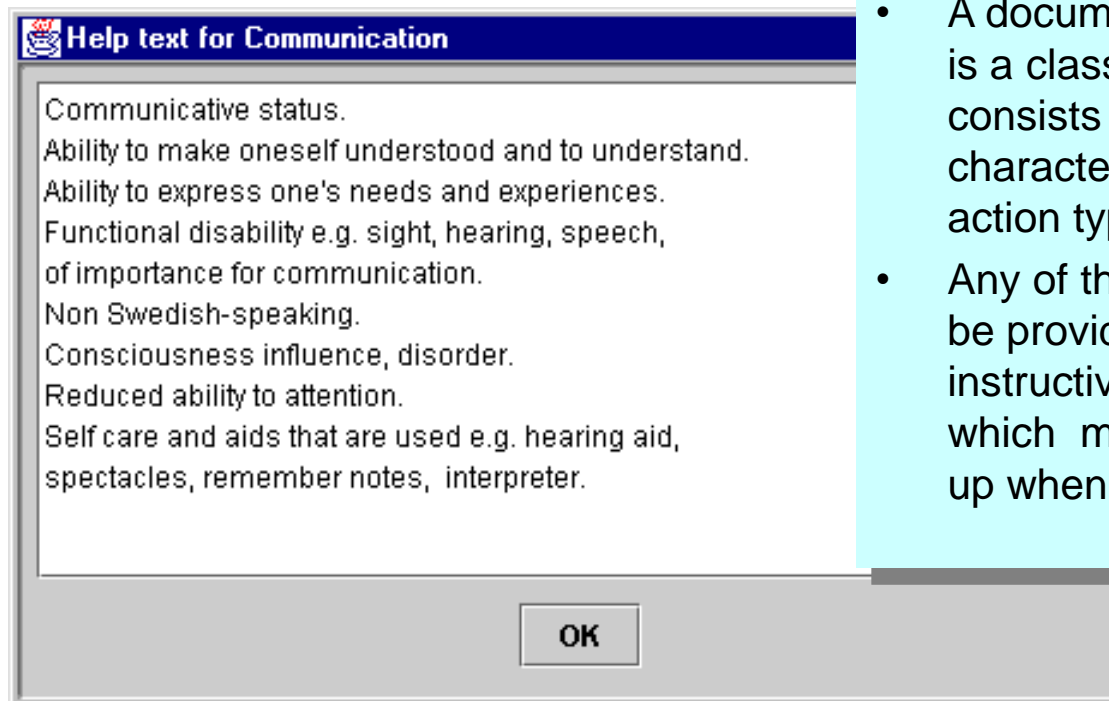
General note Nursing
Home visit: 2000-09-06 00:00 - 00:00, Planr
Responsible: Pia Snäll/PS, chef.ssk
Documentation time: 2000-10-03 13:29
Patient has had low pain the last two days. VAS 2.

Nursing documentation model

Nurs.status	Med.info	Nurs.diagnosis
Nurs.status		
Communication		
Knowledge/Development		
Breathing/Circulation		
Nutrition		
Elimination		
Skin/Tissue		
Activity		
Sleep		
Pain/Sensory impression		
Sexuality/Reproduction		
Psychosocial		
Spiritual/Cultural		
Well-being		
Compound status		

- The menu bar presents the main aspects of the documentation model, which the nurses at the unit have agreed to use.
- Each menu contains the used sub-aspects, which could be at several levels.
- She selects *Nursing Status* and *Pain/Sensory impression* and fills in her observations about the patient's pain status.
- When finished, she saves and signs what she has documented.

Documentation model instructions



- A documentation model is a classification, which consists of health characteristic types and action types.
- Any of these types can be provided with instructive descriptions, which may be picked up when documenting.

Documentation models

Category:	Nursing ▼
	Medicine
	Nursing
	Curator
	Dietician
	Worktherapist
	Physiotherapist
	Next-of-kin
	Patient

- At this unit there are several categories of healthcare professionals working: doctors, nurses, dieticians, work therapists, physiotherapists, curators, etc.
- Also note that it is possible for non-professional care givers (relatives, etc) and the patient him/herself to document, using simple documentation models.
- As seen, each category documents separately according to their agreed documentation model
- The work, though, is performed team-orientedly
- To support the need to get a comprehensive view over category/unit borders of what is documented was highly prioritized by the care teams

Views across categories and units

- Standard views

Patient Information Patient: **101112-1234 Kalle Kula** **NB!**

Standard Views **Define View**

Select View:

Select time interval:

Select Server:

Event Time	Server	Category	Note/Contact Ty...	Keyword	Note	Responsible/...
2000-09-03 12:00	cdPall	Medicine	Admission note Home visit	Status Pain	Free from pain at this moment, but describes inbearable interval pains 1-2 times/week. VAS 6-8.	Gerhard Good böl
2000-09-04 13:15	cdPall	Nursing	General note Home visit	Nurs.status Pain/Sensory impression	Patient calls due to pain. VAS 5.	Pia Snäll chef.ssk
2000-09-05 10:30	cdPall	Worktherapist	General note Home visit	Status Pain	Patient is beginning to feel pain when in bed.	Axel Käpp arbetsterapeut
2000-09-06 13:29	cdPall	Nursing	General note Home visit	Nurs.status Pain/Sensory impression	Patient has had low pain the last two days. VAS 2.	Pia Snäll chef.ssk
2000-09-09 09:30	cdPall	Worktherapist	General note Home visit	Status Pain	Has difficulties to move and to rest comfortably in bed.	Axel Käpp arbetsterapeut

Views across categories and units

- Definable views

Standard Views **Define View**

Define Selection:

Server: **cdhemtj** Category: **Care** Aspect (keyword): **Pain** Time Interval: **Last 2 Months** **Add**

Selection:

Server	Category	Aspect (keyword)	Time Interval
cdPall	Nursing	Nurs.status/Pain/Sensory impression	Last 2 Months
cdPall	Worktherapist	Status/Pain	Last 2 Months
cdhemtj	Care	Status/Pain	Last 2 Months

Search **Remove** **Clear**

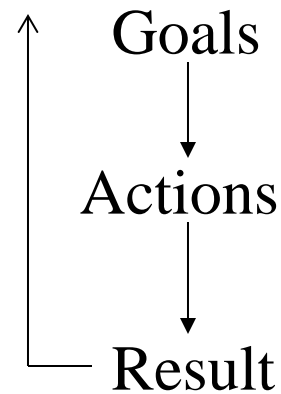
Event Time	Server	Category	Note/Contact Type	Keyword	Note	Responsible/S...
2000-09-03 12:00	cdPall	Medicine	Admission note Home visit	Status Pain	Free from pain at this moment, but describes inbearable interval pains 1-2 times/week. VAS 6-8.	Gerhard Good böl
2000-09-04 13:15	cdPall	Nursing	General note Home visit	Nurs.status Pain/Sensory impression	Patient calls due to pain. VAS 5.	
2000-09-05 10:30	cdPall	Worktherapist	General note Home visit	Status Pain	Patient is beginning to feel pain when in bed.	
2000-09-06 13:29	cdPall	Nursing	General note Home visit	Nurs.status Pain/Sensory impression	Patient has had low pain the last two days. VAS 2	
2000-09-08 17:30	cdhemtj	Care	General note Home visit	Status Pain	Patient's wife says he doesn't sleep well at night as he has pain.	
2000-09-09 09:30	cdPall	Worktherapist	General note Home visit	Status Pain	Has difficulties to move and to rest comfortably in bed.	arbetsterapeut

Note that this
documentation is
derived from the
Home service'

CD
server

Care Planning

- Individual care plans may be created for patients
- A care plan is created at a planning conference
- The professionals in the team agree on problem, health issue, goals for care and duration. These make up the care plan agreement.
- The plan may comprise actions from several professional categories from one or more units
- The agreement object is kept at the main responsible unit's CD server
- The action objects are distributed over participating units' CD-servers according to responsibility



Agreement view of care plan

ord Category: Nursing

Patient Information Patient: 101112-1234 Kalle Kula **NBI**

Save
Change
Sign

Medical Diagnosis:
Prostate cancer with metastases.

Need/Problem:
Pain and uneasiness from wound bandage, VAS 5.

Sub Goal:
Reduce pain to VAS 3 within one week.

Main Goal:
To give the patient high quality care in his home towards end of life.

Aspect (keyword): Pain/Sensory impression **Planned Eval. Date:** 2000-09-11

Category/type	Action Description	Category	Unit	Responsible...	Planned Star...	Schedule	Signed
Special care	Remove bandage and shower before change of bandage	C	Östermalms hemtjänst	Pelle Omsorg/PO vårdbiträde	2000-09-04 13:00	2 times/week wed, sat	
Special nursing	Dressing by duoderm plate after shower		ASiH-Nord	Mona Tunga/MT	2000-09-04 14:00	2 times/week wed, sat	
Environment	Order extra mattress						

Coordination
Coordination Information:
Meet personnel from Home service
Hand over door key.

Planning Contacts:
Home service team 2, blue team, phone: 00-99 11 99.

Responsible Professional: chef.ssk
Responsible Unit: ASiH-Nord
Signs: Pia Snäll/PS, chef.ssk

10:20

The professionals in the team agree on need/problem, health issue, goals for care and duration. These make up the care plan agreement.

The agreement object is kept at the main responsible unit's CD server

Responsibility view of care plan

Category: **Nursing** **NB!**

Patient Information Patient: **101112-1234 Kalle Kula**

Save **Change** **Sign**

Medical Diagnosis: Prostate cancer with metastases.

Need/Problem: Pain and uneasiness from wound bandage, VAS 5.

Sub Goal: Reduce pain to VAS 3 within one week.

Main Goal: To give the patient high quality care in his home towards end of life.

Aspect (keyword): Pain/Sensory impression **Planned Eval. Date:** 2000-09-11

Responsible...	Planned Star...	Schedule	Signed
Pelle Omsorg/PO vårdbiträde	2000-09-04 13:00	2 times/week wed, sat	
Mona Trygg/MT ssk	2000-09-04 14:00	2 times/week wed, sat	
ssk - en/AK	2000-09-05	within 3 days	

Coordination

Coordination Information: Meet personnel from Home service outside front door. Hand over door key.

Planning Contacts: Home service team 2, blue team, phone: 00-99 11 99.

Event Time: 2000-09-04 10:00

Planning Conference (from-to): 2000-09-04 10:00 - 2000-09-04 10:20

Documentation time: 2000-10-03 14:39

Responsible Professional: Pia Snäll/PS, chef.ssk

Responsible Unit: ASiH-Nord

Signs: Pia Snäll/PS, chef.ssk

A care plan is created at a planning conference. A planning conference is seen as an indirect patient contact. ASiH-Nord is the responsible unit for this shared care plan and Chief nurse Pia is the main responsible professional.

Coordination view of care plan

Patient Information

Patient: **101112-1234 Kalle Kula**

NB!

Save

Change

Sign

New Action

Open Action

Delete Action

Close

Medical Diagnosis:

Prostate cancer with metastases.

Need/Problem:

Pain and uneasiness from wound bandage, VAS 5.

Sub Goal:

Reduce pain to VAS 3 within one week.

Main Goal:

To give the patient high quality care in his home towards end of life.

Aspect (key)

Category/type	Action Description	Care
Special care	Remove bandage and shower before change of bandage	Care
Special nursing	Dressing by duoderm plate after shower	Nurs
Environment	Order extra soft bed mattress	Workin

Coordinative information applying to planned actions may be entered as well as information about planning contacts.

Coordination

Coordination Information:

Meet personnel from Home service outside front door.
Hand over door key.

Planning Contacts:

Home service team 2, blue team, phone: 00-99 11 99.

Event Time: 2000-09-04 10:00

Planning Conference (from-to):
2000-09-04 10:00 - 2000-09-04 10:20

Documentation time: 2000-10-03 14:39

Responsible Professional: Pia Snäll/PS, chef.ssk

Responsible Unit: ASiH-Nord

Signs: Pia Snäll/PS, chef.ssk

Action view of care plan

Unit: **ASIH-Nord** Category: **Nursing**

Patient Information Patient: **101112-1234 Kalle Kula** **NBI**

Save
Change
Sign

Medical Diagnosis:
Prostate cancer with metastases.

Need/Problem:
Pain and uneasiness from wound bandage, VAS 5.

Sub Goal:
Reduce pain to VAS 3 within one week.

Main Goal:
To give the patient high quality care in his home towards end of life.

Aspect (keyword): Pain/Sensory impression **Planned Eval. Date:** 2000-09-11

Category/type	Action Description	Care Category	Unit	Responsible...	Planned Star...	Schedule	Signed
Special care	Remove bandage and shower before change of bandage	Care	Östermalms hemtjänst	Pelle Omsorg/PO vårdbiträde	2000-09-04 13:00	2 times/week wed, sat	
Special nursing	Dressing by duoderm plate after shower	Nursing	ASIH-Nord	Mona Trygg/MT ssk	2000-09-04 14:00	2 times/week wed, sat	
Environment	Order extra soft bed mattress	Worktherapist	ASIH-Nord	Axel Käpp/AK arbetsterapeut	2000-09-05	within 3 days	

New Action
Open Action
Delete Action
Close

Coordination
Coordination Information:
Meet pe
Hand o

Event Time: 2000-09-04 10:00

Planning
Home s

Signs: Pia Sjöström/PS, Chen/SSK

The plan may comprise actions from several professional categories from one or more units.
The action objects are distributed over participating units' CD-servers according to responsibility.

Shared Care Plans

Shared between Palliative unit and Home service unit

Local to Palliative unit

- The care plans for a particular patient are put together in a care plan summary.

Patient Information		Patient: 101112-1234 Kalle Kula							NB!
New	Created Time >	Aspect (keyword)	Need/Problem	Care Category	Unit	Responsible	Planned Eval. ...	Evaluate...	
Open	2000-09-04 10:00	Pain/Sensory impression	Pain and uneasiness from wound bandage, VAS 5.	Care Nursing Worktherapist	Östermalms hemtjänst ASiH-Nord ASiH-Nord	Pia Snäll/PS chef.ssk	2000-09-11		
Evaluate	2000-09-05 16:00	Nutrition	Sickness	Dietician Nursing	ASiH-Nord ASiH-Nord	Pia Snäll/PS chef.ssk	2000-09-16		
Delete									

- The summary shows the care plans that are local to the unit and the care plans that are shared between units.
- A care plan that is shared between Palliative unit and the Home service unit thus is presented at both units in addition to the plans that are local to each unit.

Evaluation of care

Server: **cdPall** Category: **Medicine** Aspect (keyword): **General** Time Interval: **All** **Add**

Selection:

Server	Category	Aspect (keyword)	Time Interval
cdhemtj	Care	Special care	From 2000-09-04 10:00
cdhemtj	Care	Nurs.status/Pain/Sensory impression	From 2000-09-04 10:00
cdPall	Nursing	Special nursing	From 2000-09-04 10:00
cdPall	Nursing	Nurs.status/Pain/Sensory impression	From 2000-09-04 10:00
cdPall	Worktherapist	Environment	From 2000-09-04 10:00
cdPall	Worktherapist	Nurs.status/Pain/Sensory impression	From 2000-09-04 10:00

- Care plans are evaluated at team planning conferences
- The application prepares a summary of the documentation that may be relevant for the evaluation of the care plan, based on
 - health aspect
 - types of planned actions
 - time
- This view may be augmented by the evaluating group before generation
- The evaluation result is entered and stored and the care plan is marked as evaluated.

Search Remove Clear Close

Authorisation

- Pia tries to delete an existing patient. Before the delete request is executed, the CD server consults IACS (Information Access Control Service), which evaluates the rules defined for the "delete patient" operation. IACS in turn consults the Enterprise Manager for the up-to-date authority code for Pia.
- As the evaluation result is negative, the CD server inhibits the access, and the user is informed.

The screenshot displays a medical software interface with a top navigation bar containing 'Patients', 'Referral In', 'Care Plan', 'Documentation', and 'Search and'. Below this, a 'Patient Information' section shows 'Patient: 121212-1212 Kalle'. A left sidebar contains buttons: 'Get', 'Save', 'Delete', 'Get Patient', 'Save Patient', and 'Delete Patient'. The main area has fields for 'Referral Id:', 'Patient Person Id: 121212-1212', 'Name: Kalle Dussin', 'Requester Professional:', and 'Unit:'. At the bottom, there is a 'Referral Document Reference:' field. An 'Alert' dialog box with a red stop sign icon is overlaid on the 'Professional:' field, displaying the text 'No Authority' and an 'OK' button.

CareDocumentationManager, version 1.3.0, server cdPall

Request Patient **Classification**

Classification tool

Name: Documentation model - Worktherapist

Version: 1

Care Category: Worktherapist

Classification Type: Documentation Model

Description:

Effective from: 2000-04-10

Effective to: tv

Select Get Create Update Delete

Action Type	Health Characteristic Type
Healthcare Contact Type	Healthcare Contact Role

Select Classification

Select Classification

- Contact types - Nursing/1
- Note types - Nursing/1
- Documentation model - Curator/1
- Contact types - Medicine/1
- Note types - Worktherapist/1
- Vårdplansmodell - Gemensam/1.3.0
- Documentation model - Physiotherapist/1
- VIPS Documentation model - Nursing/1
- Contact roles - Nursing/1
- Preparation forms - Medicine/1
- Note types - Patient/1
- Note types - Curator/1
- Contact roles - Medicine/1
- Contact roles - Curator/1

- Using the classification tool, types of health characteristics, actions, contacts, etc, may be specified
- Important types of classifications are:
 - documentation model
 - note types
 - contact types
 - contact roles

Concluding

- This demo has shown a selected part of the functionality of the AHHC/CD application, including
 - documenting according to locally agreed models
 - cross-category, cross-unit view specification and generation
 - shared care planning
 - access control, and
 - building dedicated applications using the classification tool.
- Interoperation between InterCare components: CD Server, Enterprise Manager, Access Decision Server (IACS).