SOCIEDAD ESPAÑOLA DE FARMACIA HOSPITALARIA

CONGRESO NACIONAL DE LA SEFH

I ENCUENTRO IBEROAMERICANO DE FARMACÉUTICOS DE HOSPITAL

CONTINUIDAD ASISTENCIAL: CONCILIACIÓN Y SEGUIMIENTO AL ALTA

Javier Bautista

Hospital U. Virgen del Rocío

HOSPITALES UNIVERSITARIOS
VIRGEN DEL ROCÍO

ARTÍCULO ESPECIAL

Conciliación de la medicación

Olga Delgado Sánchez[a], Laura Anoz Jiménez[b], Amparo Serrano Fabiá[c] y Jordi Nicolás Pico[d] en representación del Grupo de Investigación de la I Beca Joaquim Bonal 2006

DEFINICIÓN: Proceso que consiste en valorar el tratamiento previo junto con la prescripción actualizada después de la transición asistencial:

- **ingreso hospitalario**
- **cambio de adscripción (traslado)**
- **alta hospitalaria**

OBJETIVO: Garantizar que los pacientes reciben los medicamentos necesarios que estaban tomando previamente a la transición, a la dosis, vía y frecuencia correctas, y que los mismos son adecuados a la nueva situación, evitando omisiones, duplicidades, errores de dosis o interacciones.

Approximately 60% of all medication errors in the hospital occur at admission, intra-hospital transfer or discharge.

J Clin Outcomes Manag 2001;8:27-34

The Joint Commission | Joint Commission International | World Health Organization

WHO Collaborating Centre for Patient Safety Solutions

Aide Memoire

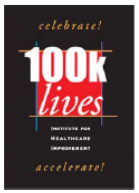
Assuring Medication Accuracy at Transitions in Care

INSTITUTE FOR HEALTHCARE IMPROVEMENT

The Institute for Safe Medication Practices

A Nonprofit Organization Educating the Healthcare Community and Consumers About Safe Medication Practices

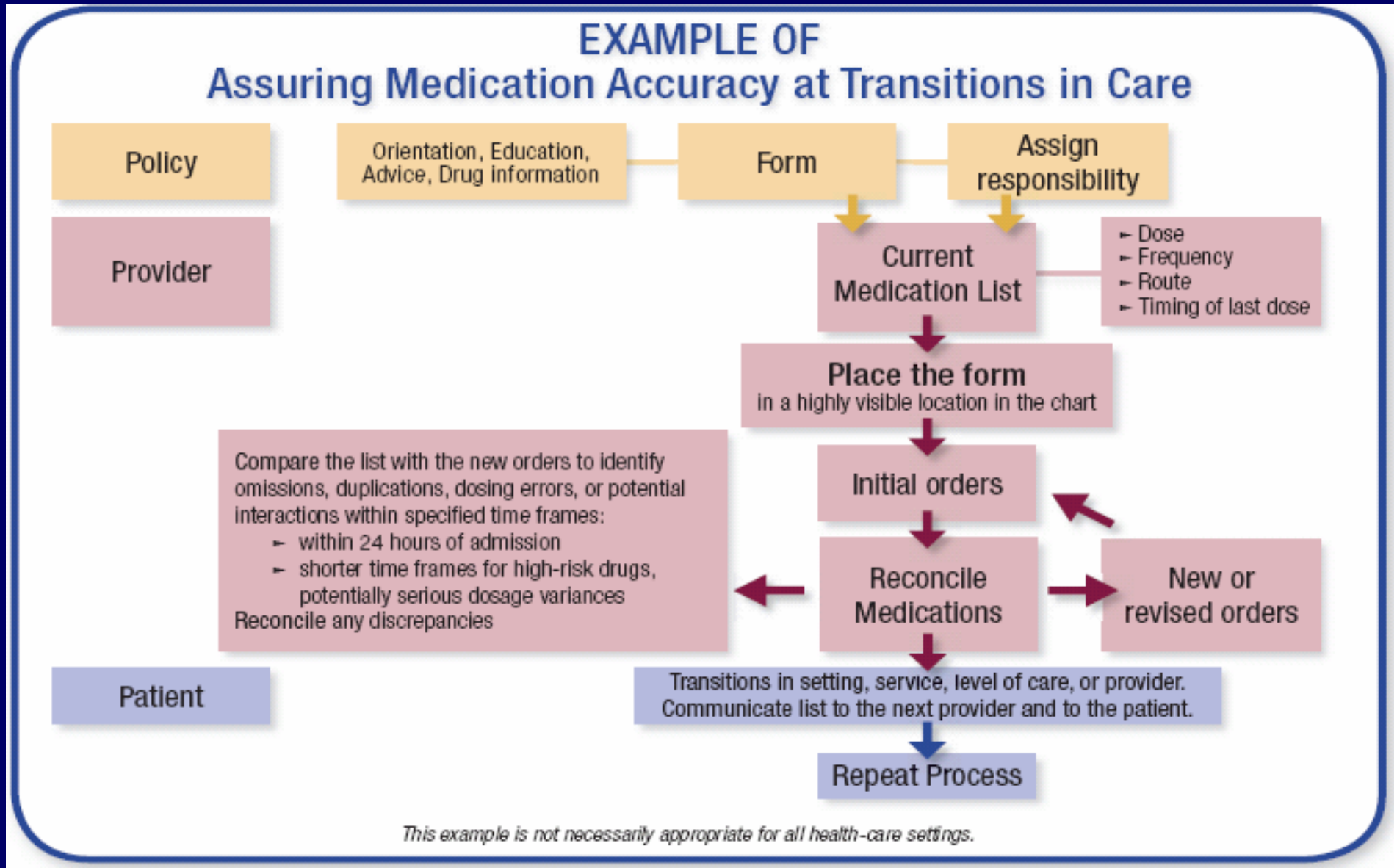
Numerosos organismos oficiales e instituciones prestan una gran atención a la Reconciliación de los tratamientos:



Getting Started Kit:
Prevent Adverse Drug Events (Medication Reconciliation)

- **The Joint Commission's sentinel event database includes more than 350 medication errors resulting in death or major injury. Approximately half of those would have been avoided through effective medication reconciliation.**
- **The JCAHO has recognized the importance of medication reconciliation, making it a requirement for hospital accreditation.**
- **A 2005 Joint Commission National Patient Safety Goal (NPSG) requires hospitals to reconcile medications across the continuum of care (january 2006).**

Algoritmo del proceso de Conciliación:



Fases del proceso de Conciliación:

- *Creating the most complete and accurate list possible or "Best Possible Medication History" (BPMH) of all medications the patient is currently taking—also called the "home" medication list.*
- *Comparing the list against the admission, transfer, and/or discharge orders when writing medication orders; identifying and bringing any discrepancies to the attention of the prescribing health professional; and, if appropriate, making changes to the orders while ensuring the changes are documented.*
- *Updating the list as new orders are written to reflect all of the patient's current medications.*
- *Communicating the list to the next provider of care whenever the patient is transferred or discharged and providing the list to the patient at the time of discharge.*

Relación de tratamientos domiciliarios (BPMH)

GBMC HEALTHCARE
6701 North Charles Street
Baltimore, MD 21204

OUTPATIENT HOME MEDICATION RECONCILIATION FORM

Patient home medication recorded on admission:
Documented by: _____
Date: _____Time: _____

MEDICATION / HERBAL / VITAMINS / CONTRAST / OVER THE COUNTER

NAME	DOSE	REASON	LAST TAKEN

Allergy or Adverse Reactions	**TYPE**	**SEVERITY**	**DATE**

Reviewed by Attending of Record or Designee:

On Admission_____Date/Time_____

Change in level of Care _____ Date/Time_____

On Discharge_____Date/Time_____

Form #722-819 (2/06)

Programas informáticos

CLINICAL DECISION SUPPORT

THOMSON HEALTHCARE

Medication Reconciliation Solution

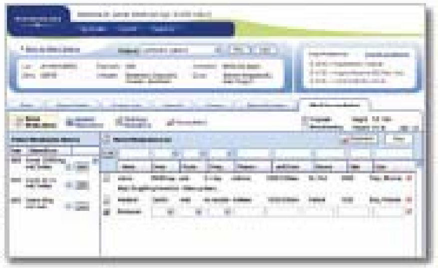
Medication Safety

The Medication Reconciliation Solution from Thomson Healthcare streamlines the process of creating, managing, and reconciling a patient's medication list from admittance through discharge

Overview

Managing a patient's list of medications is a difficult task that involves cooperation between the hospital, the patient, and many outside sources. As a result, caregivers often find themselves lacking a complete picture of the medications a patient is taking.

The Medication Reconciliation Solution from Thomson Healthcare is a Web-based application that simplifies and automates the process of creating, managing, and reconciling a patient's list of medications at every stage of their movement through the hospital. It integrates data from the hospital HIS system and outside prescription history data with tools for drug identification and interaction checking, providing comprehensive management of the patient medication list.



The Medication Reconciliation Solution results in improved patient care, increased efficiency, lower costs, and full compliance with the Joint Commission's medication reconciliation requirements.

How It Works

By integrating data from local pharmacies, insurance purchases, and discharge medications from previous hospital visits, the Medication Reconciliation Solution automatically creates a list of a patient's current home medications. Caregivers can then choose to continue, discontinue, modify, or add medications at each transition through a visual reconciliation process. Upon discharge, orders can be sent electronically to the patient's pharmacist along with notification to the primary care provider.

For more information, call (800) 525-9083, ext. 6095.

Features

- Pre-Populated Medications
  Provides an electronic list of a patient's home medications
- Drug Identification Tool
  Provides images, descriptions, and imprint codes to aid in identifying unknown tablets and capsules
- Interaction Checking
  Automatically checks for allergies, duplications, interactions, and warnings
- Electronic Reconciliation
  Helps manage and communicate home, inpatient, and discharge medication lists across the care team
- Automated Ordering System
  Automatically sends new orders to the pharmacy
- Drug Information
  Links directly to comprehensive drug information

Benefits

- Significantly reduces the potential for adverse drug events due to incomplete or incorrect medication lists
- Eliminates the need to manually reconcile patient medications – saving time and effort
- Satisfies JC (formerly JCAHO) medication reconciliation requirements
- Streamlines communication between clinicians at all stages of care, including transitions and outpatient settings
- Generates an accurate discharge medication list, prescriptions, and clear instructions

www.ThomsonHealthcare.com

THOMSON

Medstat • MercuryMD • Micromedex • PDR • Solucient

Iniciativas

Improving Medication Reconciliation Across Settings: Using Six Sigma Methodology

Iowa Foundation for Medical Care

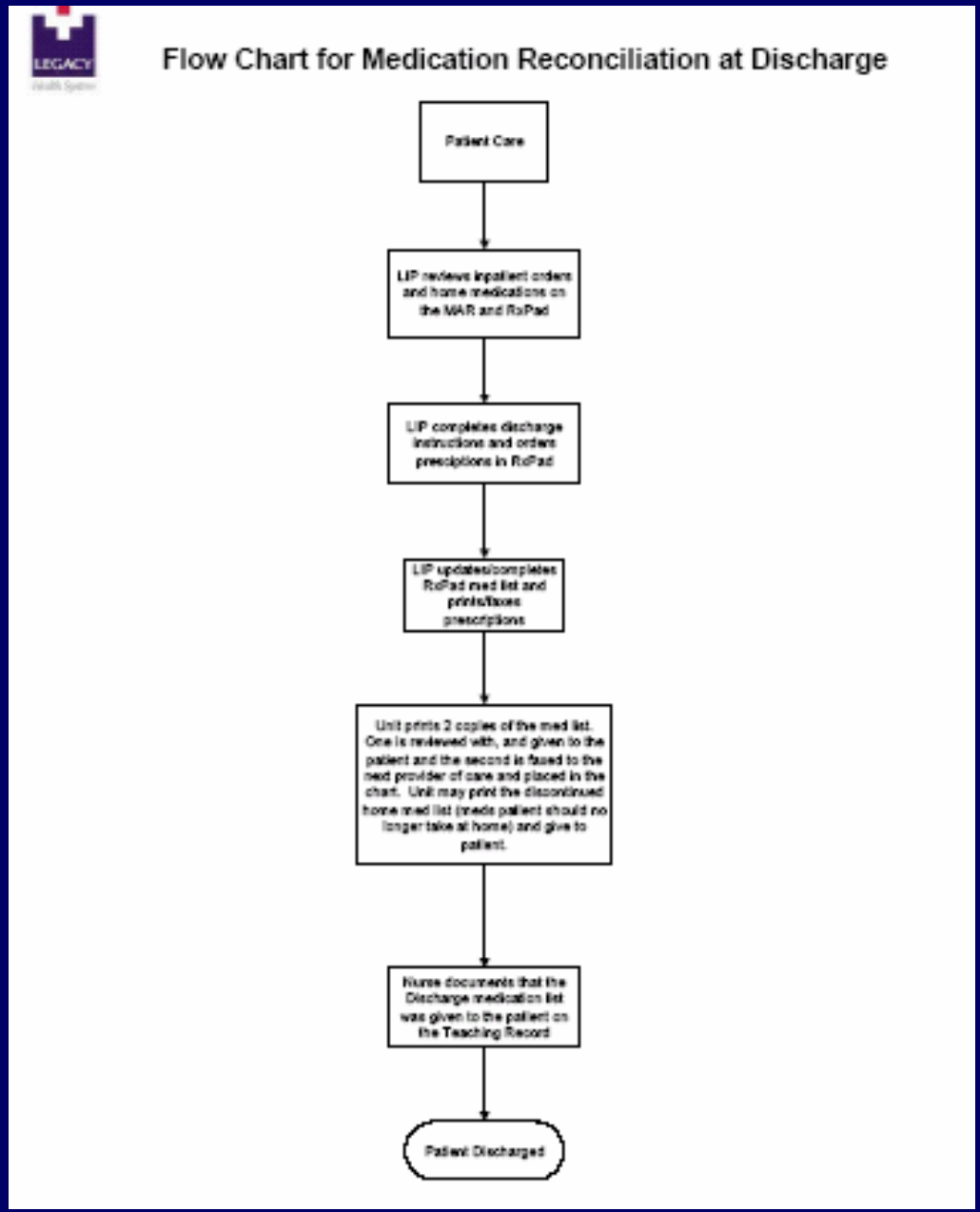
12th Annual Quality Forum

May 2, 2006

Mercy Medical Center – Des Moines

Mercy SIX SIGMA

Protocolos de actuación:



American Society of Health-System Pharmacists®

TOGETHER WE MAKE A GREAT TEAM

Policy

Medication Reconciliation

UW Hospital and Clinics

Policy Number: 7.60
Manual: Hospital Administrative
Section: Patient Support (Hospital Administrative)
Effective Date: April 3, 2007
Version: Original

I. PURPOSE:

To accurately and completely reconcile medications across the continuum of care.

II. POLICY:

A complete list of a patient's current medications, allergies, and medication sensitivities will be obtained and documented upon admission to the organization in all relevant sites of care and all settings within UW Hospital & Clinics. This is updated at all visits whenever medications are administered, prescribed, or the response to the care or service provided to the patient could be affected by medications.

All new medications prescribed or administered will be reconciled against this list during the patient's care. Inpatients transferred between services or levels of care will have all medications reconciled. If a new medication is prescribed (or changes are made to the current regimen), the patient's electronic medication list is then updated and a copy of the updated list is provided to the patient.

A complete list of medications will be given to the patient upon discharge, and communicated to the next known provider or service when the patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization.

▶ STRENGTH OF EVIDENCE:

- Multiple uncontrolled comparison studies report decreased medication error rates after successfully implementing medication reconciliation programmes (10-12).

QUALITY CORNER

Medication Reconciliation: A Practical Tool to Reduce the Risk of Medication Errors

Peter Pronovost, Brad Weast, Mandalyn Schwarz, Rhonda M. Wyskiel, Donna Prow, Shelley N. Milanovich, Sean Berenholtz, Todd Dorman, and Pamela Lipsett

Preventable adverse drug events are associated with one out of five injuries or deaths. Estimates reveal that 46% of medication errors occur on admission or discharge from a clinical unit/hospital when patient orders are written. This study was performed to reduce medication errors in patient's discharge orders through a reconciliation process in an adult surgical intensive care unit (ICU). A discharge survey was implemented as part of the medication reconciliation process. The admitting nurse initiated the survey within 24 hours of ICU admission and the charge nurse completed the survey on discharge. Baseline data were obtained through a random sampling of 10% of discharges in first 2 weeks of the study (July 2001-May 2002). Medical and anesthesia records were reviewed, allergies and home medications verified with patient/family and findings compared with orders at time of ICU discharge. Baseline data revealed that 31 of 33 (94%) patients had orders changed. By week 24, nearly all medication errors in discharge orders were eliminated. In conclusion, use of the discharge survey in this medication reconciliation process resulted in a dramatic drop in medications errors for patients discharged from an ICU. The survey is now a part of our electronic medical record and used in 4 adult ICUs and 2 medicine floors.

- A series of interventions, including medication reconciliation, introduced over a seven-month period, successfully decreased the rate of medication errors by 70% and reduced adverse drug events by over 15%.

Whittington J, Cohen H. OSF Healthcare's journey in patient safety. *Quality Management in Health Care*. 2004;13(1):53-59.

- In another study, the utilization of pharmacy technicians to initiate the reconciling process by obtaining medication histories for the scheduled surgical population reduced potential adverse drug events by 80% within three months of implementation.

  Michels RD, Meisel S. Program using pharmacy technicians to obtain medication histories. *Am J Health-Sys Pharm*. October 1, 2003;60:1982-1986.

- Several other case studies on the effectiveness of the reconciling process are also available.

  Branowicki P. *Sentinel Events: Opportunities for Change*. Presentation at Massachusetts Coalition for the Prevention of Medical Errors Conference. November 18, 2002.

- A successful reconciling process also reduces work and re-work associated with the management of medication orders. After implementation, nursing time at admission was reduced by over 20 minutes per patient. The amount of time that pharmacists were involved in discharge was reduced by over 40 minutes.

  Rozich JD, Resar RK, et. al. Standardization as a mechanism to improve safety in health care: mpact of sliding scale insulin protocol and reconciliation of medications initiatives. *Joint Commission Journal on Quality and Safety*. 2004;30(1):5-14.

NHS
National Institute for Health and Clinical Excellence

National Patient Safety Agency

Sources of evidence

The evidence considered by the Patient Safety Advisory Committee is described in the following documents.

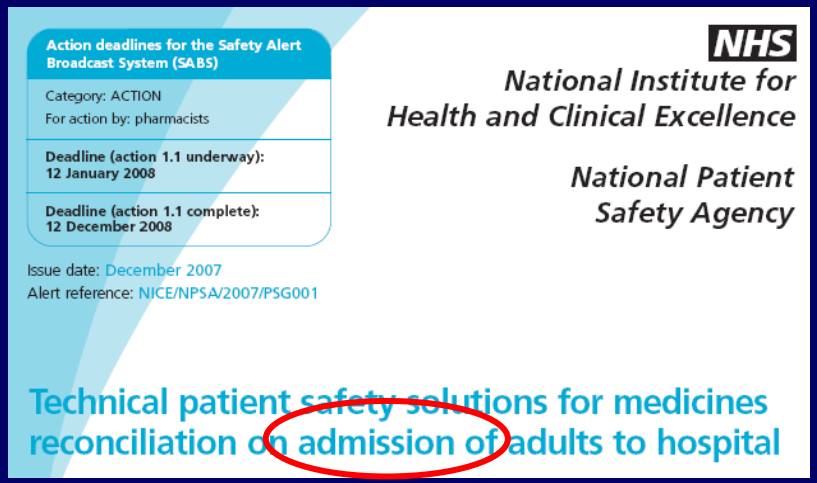
- Systematic review for clinical and cost effectiveness of interventions in medicines reconciliation at the point of admission (2007).
- Economic model for interventions in medicines reconciliation at the point of admission (2007).
- Specialist adviser comments on interventions in medicines reconciliation at the point of admission (2007).
- Patient group feedback on interventions in medicines reconciliation at the point of admission (2007).

Available from: www.nice.org.uk/PSG001

CONCILIACIÓN AL ALTA

La mayoría de los programas de conciliación de la medicación y de datos disponibles sobre su efectividad se refieren al INGRESO hospitalario

The aim of medicines reconciliation on hospital admission is to ensure that medicines prescribed on admission correspond to those that the patient was taking before admission. Details to be recorded include the name of the medicine(s), dosage, frequency, and route of administration. Establishing these details may involve discussion with the patient and/or carers and the use of records from primary care. This does not include medicines review.



Action deadlines for the Safety Alert Broadcast System (SABS)

Category: ACTION
For action by: pharmacists

Deadline (action 1.1 underway): 12 January 2008

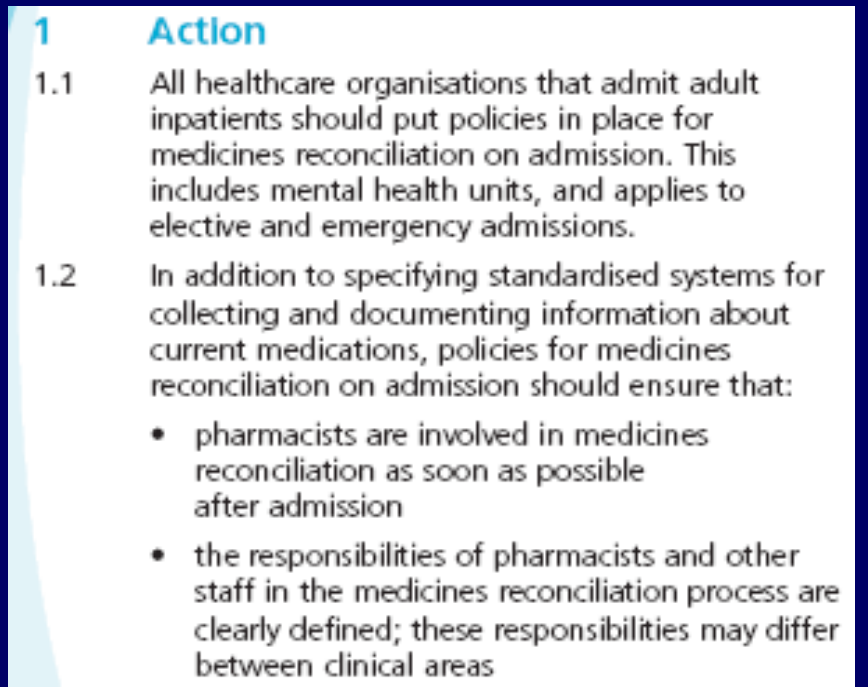
Deadline (action 1.1 complete): 12 December 2008

NHS
National Institute for Health and Clinical Excellence

National Patient Safety Agency

Issue date: December 2007
Alert reference: NICE/NPSA/2007/PSG001

Technical patient safety solutions for medicines reconciliation on admission of adults to hospital



1 Action

1.1 All healthcare organisations that admit adult inpatients should put policies in place for medicines reconciliation on admission. This includes mental health units, and applies to elective and emergency admissions.

1.2 In addition to specifying standardised systems for collecting and documenting information about current medications, policies for medicines reconciliation on admission should ensure that:

- pharmacists are involved in medicines reconciliation as soon as possible after admission
- the responsibilities of pharmacists and other staff in the medicines reconciliation process are clearly defined; these responsibilities may differ between clinical areas

Costs per 100,000 population

Recommendations with significant costs	Annual costs (£)
Additional pharmacists	15,600
Additional pharmacy technicians	10,500
Estimated cost of implementation	**26,100**

Pero la probabilidad de daño aumenta si un error de medicación se perpetúa al alta hospitalaria.

This is a corrected version of the article. The original version appears at www.cmaj.ca/cgi/content/full/170/3/345/DC1

Research

Recherche

Adverse events among medical patients after discharge from hospital

Alan J. Forster, Heather D. Clark, Alex Menard, Natalie Dupuis, Robert Chernish, Natasha Chandok, Asmat Khan, Carl van Walraven

Results: During the study period, outcomes were determined for 328 of the 361 eligible patients, who averaged 71 years of age (interquartile range 54–81 years). After discharge, 76 of the 328 patients experienced at least 1 AE (overall incidence 23%, 95% confidence interval [CI] 19%–28%). The AE severity ranged from symptoms only (68% of the AEs) or symptoms associated with a nonpermanent disability (25%) to permanent disability (3%) or death (3%). The most common AEs were adverse drug events (72%), therapeutic errors (16%) and nosocomial infections (11%). Of the 76 patients, 38 had an AE that was either preventable or ameliorable (overall incidence 12%, 95% CI 9%–16%).

Interpretation: Approximately one-quarter of patients in our study had an AE after hospital discharge, and half of the AEs were preventable or ameliorable.

ORIGINAL INVESTIGATION

Posthospital Medication Discrepancies

Prevalence and Contributing Factors

Eric A. Coleman, MD, MPH; Jodi D. Smith, ND; Devbani Raha, MS; Sung-joon Min, PhD

Background: Despite the national attention being given to the problem of medication safety, little attention has been paid to the medication problems that are encountered by older patients who are receiving care across settings. The objective of this study was to determine the prevalence and contributing factors associated with posthospital medication discrepancies.

Methods: The study population consisted of community-dwelling adults aged 65 years and older admitted to the hospital with 1 of 9 selected conditions (n=375). A geriatric nurse practitioner performed a comprehensive medication assessment in the patient's home within 24 to 72 hours after institutional discharge. The assessment focused on what older patients reported taking in comparison with the prehospital medication regimen and the posthospital medication regimen. Prevalence and types of medication discrepancies were categorized using the Medication Discrepancy Tool.

Results: A total of 14.1% of patients experienced 1 or more medication discrepancies. Using the Medication Discrepancy Tool, 50.8% of identified contributing factors for discrepancies were categorized as patient-associated, and 49.2% were categorized as system-associated. Five medication classes accounted for half of all medication discrepancies. Medication discrepancies were associated with the total number of medications taken and the presence of congestive heart failure. A total of 14.3% of the patients who experienced medication discrepancies were rehospitalized at 30 days compared with 6.1% of the patients who did not experience a discrepancy ($P=.04$).

Conclusions: A significant percentage of older patients experienced medication discrepancies after making the transition from hospital to home. Both patient-associated and system-associated solutions may be needed to ensure medication safety during this vulnerable period.

Arch Intern Med. 2005;165:1842-1847

Table 2. Categorization of Medication Discrepancies by Patient- and System-Associated Factors*

Factor	Frequency, No. (%)
Patient-associated factors	
Adverse drug effects	0
Intolerance	0
Did not fill prescription	6 (4.8)
Did not need prescription	1 (0.8)
Money/financial barriers	7 (5.6)
Intentional nonadherence	6 (4.8)
Nonintentional nonadherence	42 (33.9)
Performance deficit	1 (0.8)
Subtotal	63 (50.8)
System-associated factors	
Prescribed with known allergies/intolerances	3 (2.4)
Conflicting information from different informational sources	18 (14.5)
Confusion between brand and generic names	3 (2.4)
Discharge instructions were incomplete, inaccurate, or illegible	20 (16.1)
Duplication	10 (8.1)
Incorrect dosage	1 (0.8)
Incorrect quantity	1 (0.8)
Incorrect label	4 (3.2)
Cognitive impairment not recognized	1 (0.8)
No caregiver or need for assistance not recognized	0
Sight/dexterity limitations not recognized	0
Subtotal	61 (49.2)
Total	124 (100)

Table 3. Illustrative Examples of Medication Discrepancies

Factor	Causes and Contributing Factors
Patient-associated factors	
Nonintentional noncompliance	Before hospitalization, a patient was prescribed digoxin, 0.25 mg/d; the discharge instructions read, "digoxin, 0.125 mg/d"; she had only the prehospitalization 0.25-mg digoxin pills and had been taking them since discharge
Intentional noncompliance	A patient was admitted to the hospital for COPD exacerbation; after discharge, he was not using his maintenance steroid inhaler because he believed that "that medication makes my breathing worse"
System-associated factors	
Discharge instructions illegible or incomplete	The patient's hospital discharge instructions were written as follows: "KCl 10 mEq BID"
Conflicting information	A patient's discharge instructions indicated that she should take "nortriptyline, 50 mg at bedtime," but her new prescription bottle indicated "nortriptyline, 25 mg at bedtime"
Prescribed with known allergies	During hospitalization, a patient's medical record indicated intolerance to diltiazem; on discharge, he was prescribed "diltiazem XR, 240 mg twice daily"
Duplication	A patient was taking ranitidine before hospitalization; her discharge instructions indicated that she should take pantoprazole; at a home visit, she was found to be taking both ranitidine and pantoprazole

Eur J Clin Pharmacol (2004) 59: 841–847
DOI 10.1007/s00228-003-0708-x

PHARMACOEPIDEMIOLOGY AND PRESCRIPTION

S. Foss · J. R. Schmidt · T. Andersen · J. J. Rasmussen
J. Damsgaard · K. Schaefer · L. K. Munck

Congruence on medication between patients and physicians involved in patient course

Table 3 Source discrepancies with regard to patients' medication as disclosed by the patient, hospital and general practitioner, respectively. Discrepancies related to the use of a drug and posology, respectively. *GP* general practitioner

	At admission			At discharge			1 Month after discharge
	322 Drugs			396 Drugs			326 Drugs
	Hospital versus patient	GP versus patient	GP versus hospital	Hospital versus patient	GP versus patient	GP versus hospital	GP versus patient
Totals	162 (50%)	231 (72%)	216 (67%)	192 (48%)	249 (63%)	200 (51%)	193 (59%)
Number per patient	2 (0–10)	2 (0–17)	2 (0–17)	2 (0–10)	3 (0–16)	1 (0–20)	2 (0–15)
Drug	112 (69%)	186(81%)	168(78%)	134(70%)	209(84%)	183 (92%)	149 (77%)
n Extra drug	34	49	52	51	36	34	31
Missing drug	61	125	103	62	157	142	104
Synonyms	11	10	9	17	13	7	9
Analogues	0	1	1	0	0	0	1
Formulation	6	1	3	4	3	0	4
Posology	50 (31%)	45 (19%)	48 (22%)	58 (30%)	40 (16%)	17 (9%)	44 (23%)

48% de discrepancia entre los registros hospitalarios y lo que el paciente realmente se toma

CONCILIACIÓN AL ALTA

Medication Safety

Medication Reconciliation at Hospital Discharge: Evaluating Discrepancies

Jacqueline D Wong, Jana M Bajcar, Gary G Wong, Shabbir MH Alibhai, Jin-Hyeun Huh, Annemarie Cesta
Gregory R Pond, and Olavo A Fernandes

The Annals of Pharmacotherapy ■ *2008 October, Volume 42* ■ **1373**

CONCLUSIONS: Medication discrepancies occur commonly on hospital discharge. Understanding the type and frequency of discrepancies can help clinicians better understand ways to prevent them. Structured medication reconciliation may help to prevent discharge medication discrepancies.

KEY WORDS: hospital discharge, medication discrepancy, medication reconciliation.

Ann Pharmacother 2008;42:1373-9.

Published Online, 9 Sept 2008, *www.theannals.com*, DOI 10.1345/aph.1L190

In total, there were 1252 BPMDL medications; of these, 322 (25.7%) had a discrepancy. Of the total number of discrepancies, 45 were undocumented intentional discrepancies, 105 were actual unintentional discrepancies, and 172 were potential unintentional discrepancies

Table 2. Characteristics of Actual Unintentional Discrepancies[a]

Type of Discrepancy	n (%)
Drug	
omission	24 (22.9)
no indication[b]	1 (1.0)
therapeutic duplication[c]	3 (2.9)
inappropriate route	4 (3.8)
needs prescription for refill not addressed	3 (2.9)
inappropriate duration	3 (2.9)
Dose	
incorrect	5 (4.8)
not renally adjusted	1 (1.0)
Frequency	
incorrect	9 (8.6)
Incomplete prescription that may lead to delay in starting a medication	52 (49.5)
missing limited-use code[d]	31 (29.5)
misspelled drug name	1 (1.0)
omission of formulation	1 (1.0)
omission of dose	4 (3.8)
omission of frequency	3 (2.9)
illegible order	1 (1.0)
quantity missing	8 (7.6)
repeats on narcotics	3 (2.9)

[a] n = 105.

2007 ASHP Summer Meeting
P27D

Category: Quality Assurance / Medication-Use Safety

Type: Descriptive Report

Title: Pharmacist facilitated discharge: a prospective study of medication reconciliation and telephone follow-up interventions

Methods: A clinical pharmacist participated in multidisciplinary discharge rounds for selected general medicine services at a large Midwestern academic medical center. The pharmacist screened patients for inclusion using the following criteria: discharge to home, prescribed > 5 medications with at least one high risk medicine, English speaking, and active telephone service. They then identified and communicated discharge medication discrepancies to clinicians for reconciliation, counseled patients and families, provided a reconciled medication list to subsequent providers, and contacted patients by phone within 72 hours after discharge and at 30 days to identify and address post-discharge medication-related problems. All interventions were documented, including number and type of discrepancies, the medications involved, any post-discharge medication-related problems, and the follow-up actions taken.

Conclusion: Medication discrepancies at discharge were disturbingly common. Implementation of a pharmacist facilitated discharge process increased recognition and resolution of these errors. Follow-up telephone calls both enabled pharmacists to reinforce discharge instructions and promoted early recognition and resolution of post-discharge medication-related problems.

PROGRAMA DE CONCILIACIÓN AL ALTA

PUNTOS CLAVE:

- **Garantizar que, al alta, al paciente le ha sido prescrito el tratamiento correcto:**
  - **El médico prescribe el tratamiento al alta en el impreso de prescripción de Unidosis (se minimizan los errores)**
  - **El farmacéutico "checkea" dicho tratamiento con el "informe de alta" (intranet)**
  - **Cualquier incidencia es resuelta con el médico personalmente o por vía telefónica**
  - **Emisión de recetas al alta (aplicación de Unidosis)**
  - **Instrucciones al paciente generadas por la aplicación de Unidosis, con esquema posológico gráfico**
  - **Instrucciones al farmacéutico comunitario impresas de forma automática (prescripción por Principio Activo)**

PUNTOS CLAVE:

- **Garantizar que, durante el ingreso, el tratamiento domiciliario es mantenido (si no hay razones para lo contrario):**

  - **El farmacéutico "checkea" el tratamiento prescrito al ingreso con los informes de consultas disponibles en la intranet**
  - **Este tratamiento es confirmado con el paciente o familiares**
  - **Se comunica al médico cualquier discrepancia, a través de los impresos generados por la aplicación de Unidosis**
  - **En casos concretos se realizan directamente las modificaciones necesarias sobre la prescripción.**

EJEMPLO REAL

Paciente varón de 75 años que ingresa en la planta de Medicina Interna por empeoramiento de EPOC e IC.

Anamnesis (URGENCIAS)

Antecedentes

Personales:

-No alergias medicamentosas conocidas. Vive con su esposa. Precisa ayuda para el aseo y para vestirse.
-Fumador importante hasta enero 06. EPOC evolucionado con oxigenoterapia domiciliaria (horas de sueño). Disnea clase III MRC.
-HTA. Cardiopatía isquémica con stent en ACx hace 5 años. Ingreso en Cardiología por Síncope en enero 06: Hipertrofia septo-basal y discreta hipoquinesia posterobasal con FE 60-65%; ECOESTRES negativo para isquemia y MESA Basc. dudosamente+. Se planteó nuevo cateterismo que se obvio por su patología renal. Nuevo ingreso por disnea y dolor torácico, esta vez en Medicina Interna, en mayo 06 con seguimiento ambulatorio hasta octubre 06. Manejo conservador. Además se realizó estudio de anemia que fue compatible con ferropenia y que se puso en relación con pobre ingesta y tto esteroideo. Desde septiembre de 07 de nuevo en seguimiento en nuestra Unidad de Día por episodios anginosos y disnea (ver informe de consulta y hojas de evolución para más detalle). Ingresó el pasado 22/03/08 (alta 1/04/08) por reagudización de su EPOC en contexto de sobreinfección de bronqueictasia derecha. Se retiraron betabloqueantes (carvedilol).
-HBP (seguimiento por urología en CCEE Virgen de los Reyes). Nefrectomía izda hace unos 8 años. Enfermedad renal crónica con creatinina basal entorno a 2.5-3 mg/dl.
-Ulcus gastroduodenal sin sangrado hace años.

Anamnesis (URGENCIAS)

Enfermedad actual

Paciente en seguimiento en consultas de medicina interna, que en el ultimo mes presenta aumento de su disnea habitual y edemas maleolares, sin mejoria tras antibioterapia con amoxicilina-clavulanico y aumentar dosis de furosemida. Cultivo de esputo del 8/8/08 se aisló EColi BLEE. Analitica 16/9/08: funcion renal estable. No leucocitosis significativa.

Pruebas Complementarias

Analitica 16/9/08: urea 82, acido urico 12.10, creatinina 2.64, TG 227, leucocitos 11880, neutrofilos 72.2%, Hb 114, Hct 36%, sideremia 26, ferritina 41, VSG 104, PCR 90.1. Gasometria venosa: pH 7.33, pCO2 56.9

Juicio Clínico

EPOC evolucionado.
Cardiopatia isquémico-hipertensiva

Tratamiento al ingreso

Dieta sin sal + renal
Controles y medidas habituales. Diuresis por turnos
Hemocultivo si tª > 38º
O2 en gafas a 2 l xmin

MEDICACIÓN:
Enoxaparina 20 mg sc / 24 h
Furosemida 1 amp iv / 8 h
Omeprazol 20 mg v.o. / 24 h
Espironolactona 25 mg v.o. / 24 h
Piperacilina-tazobactam 3 g / 8 h
Clopidogrel 75 mg v.o. / 24 h
Paracetamol 500 mg / 8 h
Finasterida 5 mg / 24 h
Sevredol 10 mg v.o. si dolor (cada 4 h)
Fentanilo 50 mcg un parche cada 72 h
Lactitol 1 sobre / 8 h. Enema Casen si no deposiciones / 48 h
Parche nitritos 15 mg 9 a 23:00 h
Acetilcisteina 600 mg / 24 h
Aerosoles con Atrovent / 8 h
Budesonida 2 inh / 12 h (enjugue bucal posterior)

El farmacéutico “checkea” el tratamiento prescrito al ingreso con los informes de consultas disponibles en la intranet

Juicio Clínico

Ultimo informe de Consultas

Principal:

Insuficiencia cardiaca agudizada en paciente con cardiopatía isquémica crónica e insuficiencia renal crónica.

Secundarios:

a.:

Los mencionados en los antecedentes personales descritos.

Tratamiento

- Dieta sin sal.
- Omeprazol 20 mg 1 cáps/24h en deayuno.
- Furosemida 40mg 1 comp en desayuno y 1 comp. en almuerzo.
- Eritropoyetina 5000UI a la semana (lunes).
- Clopidogrel 75mg 1 comp/24h.
- Paracetamol 500 mg 1 comp/8h.
- Espironolactona 25mg 1 comp/24h
- Finasterida 5mg 1 comp/24h.
- Sevredol 10mg 1 comp si dolor.
- Fentanilo 50 mcg/72h en parche.
- Lactitol 10g 1 sobre en desayuno y cena.
- Nitroglicerina 15mg parche de 9-23h
- Acetilcisteina 600mg 1 sobre/24h
- Ipratropio 2 puff/8h
- Budesonida 2 puff/12.

Centro de Documentación Clínica - Microsoft Internet Explorer

Hospitales Universitarios Virgen del Rocío
Centro de Documentación Clínica

Servicio Andaluz de Salud
CONSEJERÍA DE SALUD

Usuario: Bautista Paloma, Francisco Javier

Identificación del Paciente

Paciente:

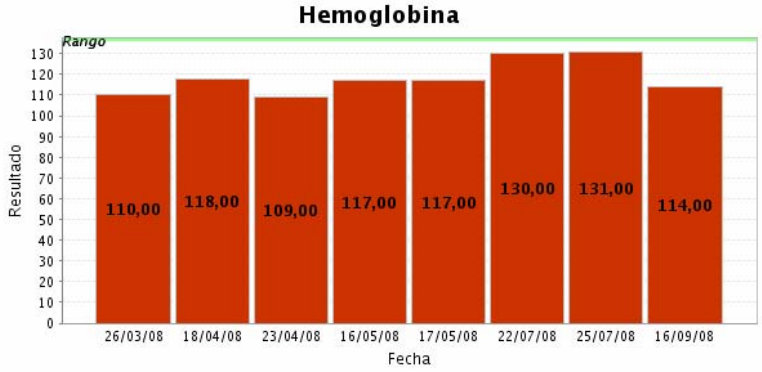
Historia Clínica: 1089975

Rango de Fechas

Desde el día: Hasta el día: Mostrar

Hemoglobina (g/L) Val. Ref. [136 - 180]

Fecha Prueba	Código Prueba	Resultado	Comentario
29/12/2005	9213	154	-
31/12/2005	9213	153	-
01/01/2006	9213	145	-
02/01/2006	9213	147	-
04/01/2006	9213	136	-
09/01/2006	9213	*121	-
19/01/2006	9213	*111	-
05/03/2006	9213	142	-



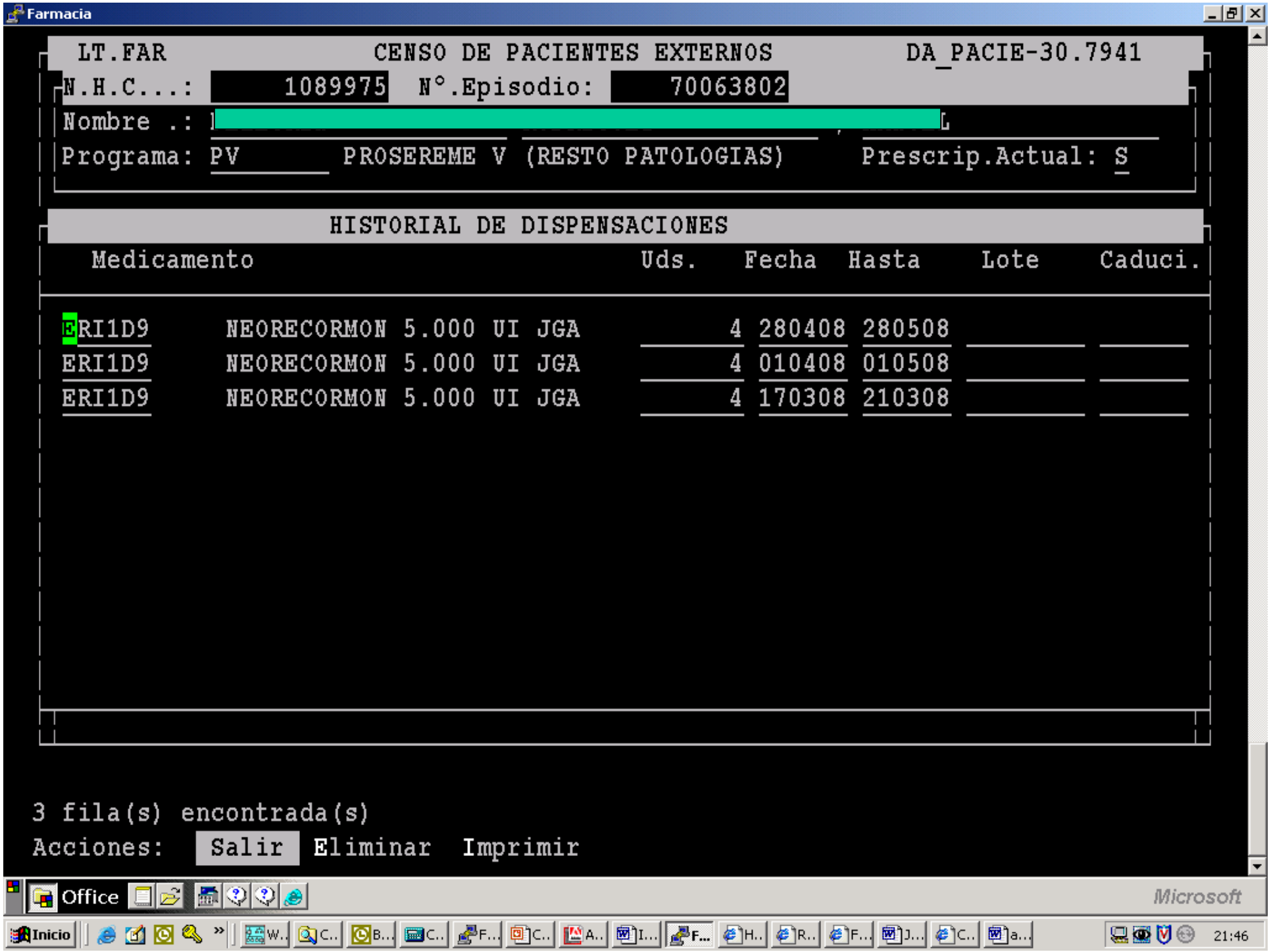
<< Anterior 1 2 3

Fecha Episodio | Unidad Funcional | Tipo Episodio | Informes y Estudios | Secciones Laboratorio | Procesos Asistenciales

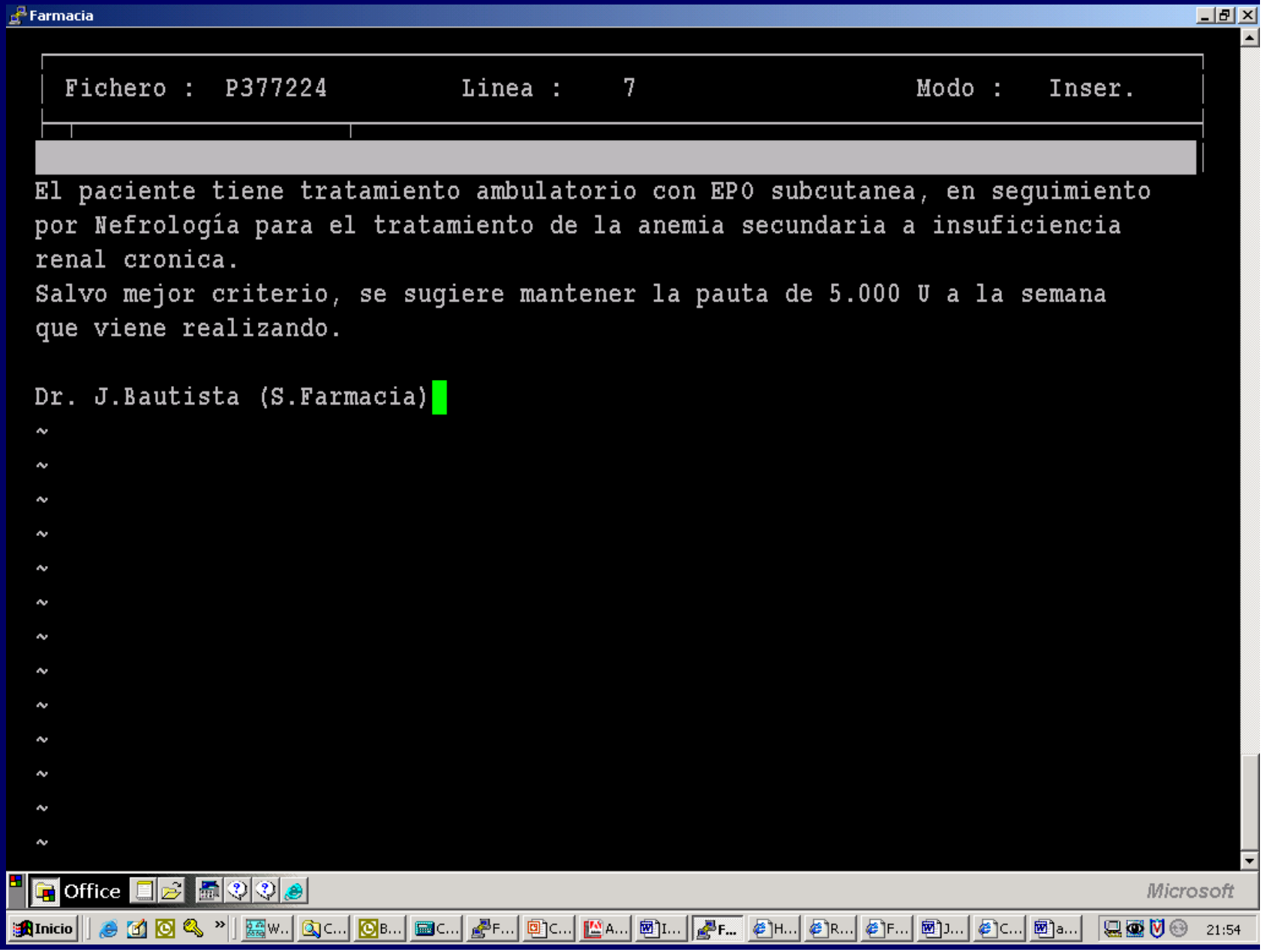
Soporte CDCA Tfno: 313301 (de Lunes a Viernes de 8 a 20 horas) Guardia Localizada. Envío de Correo.

Sevilla, Lunes 22 de Septiembre de 2008 20:47:23

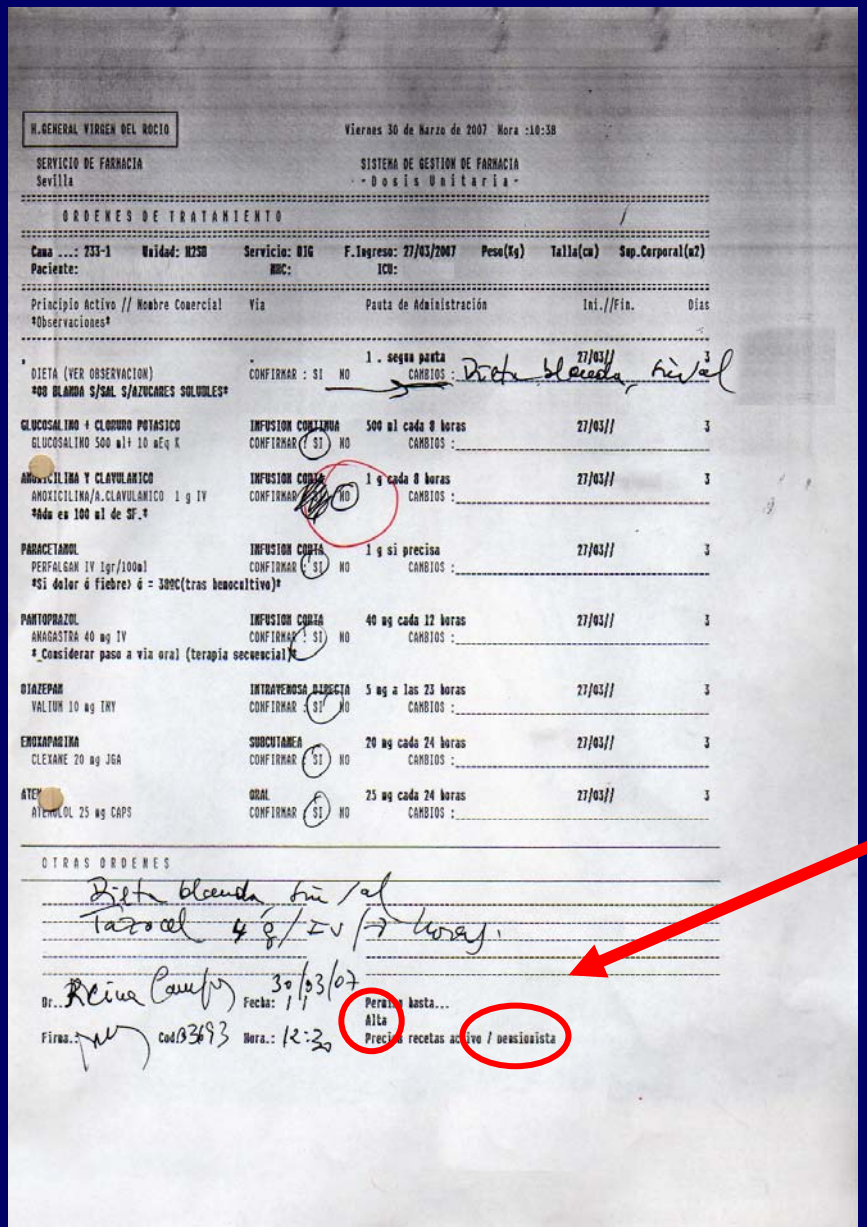
Inicio | Online - Mocha LPD | Centro de Document... | MultiBase-TransTOOLs | HOSPITALES UNIVE... | Farmacia | Juicio Clínico - Micros... | ES | 20:47


Farmacia
LT.FAR
CENSO DE PACIENTES EXTERNOS
DA_PACIE-30.7941
N.H.C...: 1089975
N°.Episodio: 70063802
Nombre .:
Programa: PV PROSEREME V (RESTO PATOLOGIAS)
Prescrip.Actual: S
HISTORIAL DE DISPENSACIONES
Medicamento
Uds.
Fecha
Hasta
Lote
Caduci.
ERI1D9 NEORECORMON 5.000 UI JGA 4 280408 280508
ERI1D9 NEORECORMON 5.000 UI JGA 4 010408 010508
ERI1D9 NEORECORMON 5.000 UI JGA 4 170308 210308
3 fila(s) encontrada(s)
Acciones: Salir Eliminar Imprimir
Office
Microsoft
Inicio
21:46

Se comunica al médico cualquier discrepancia, a través de los impresos generados por la aplicación de Unidosis



El médico prescribe el tratamiento al alta en el impreso de prescripción de Unidosis



H.GENERAL VIRGEN DEL ROCIO — Viernes 30 de Marzo de 2007 Hora :10:38

SERVICIO DE FARMACIA
Sevilla

SISTEMA DE GESTION DE FARMACIA
-Dosis Unitaria-

ORDENES DE TRATAMIENTO

Cama ...: 233-1 Unidad: H25B Servicio: DIG F.Ingreso: 27/03/2007 Peso(Kg) Talla(cm) Sup.Corporal(m2)
Paciente: HHC: ICU:

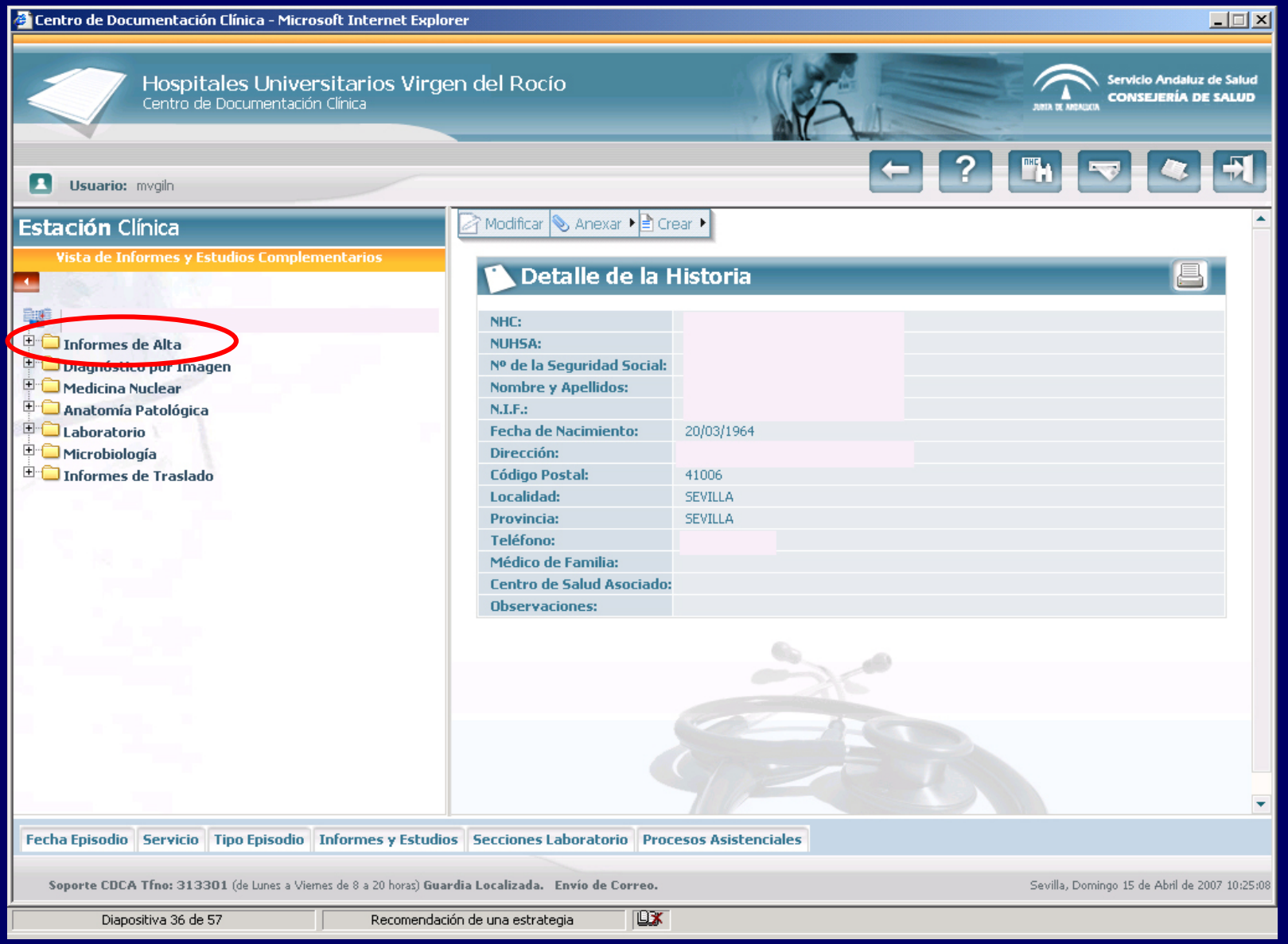
Principio Activo // Nombre Comercial *Observaciones*	Via	Pauta de Administración	Ini.//Fin.	Días
DIETA (VER OBSERVACION) *08 BLANDA S/SAL S/AZUCARES SOLUBLES*	CONFIRMAR : SI NO	1 . segun pauta CAMBIOS : Dieta blanda hipocal	27/03//	3
GLUCOSALINO + CLORURO POTASICO GLUCOSALINO 500 ml+ 10 mEq K	INFUSION CONTINUA CONFIRMAR : SI NO	500 ml cada 8 horas CAMBIOS :	27/03//	3
AMOXICILINA Y CLAVULANICO AMOXICILINA/A.CLAVULANICO 1 g IV *Ada en 100 ml de SF.*	INFUSION CORTA CONFIRMAR : SI NO	1 g cada 8 horas CAMBIOS :	27/03//	3
PARACETAMOL PERFALGAN IV 1gr/100ml *Si dolor ó fiebre) ó = 38ºC(tras benocultivo)*	INFUSION CORTA CONFIRMAR : SI NO	1 g si precisa CAMBIOS :	27/03//	3
PANTOPRAZOL ANAGASTRA 40 mg IV *Considerar paso a via oral (terapia secuencial)*	INFUSION CORTA CONFIRMAR : SI NO	40 mg cada 12 horas CAMBIOS :	27/03//	3
DIAZEPAM VALIUM 10 mg INY	INTRAVENOSA DIRECTA CONFIRMAR : SI NO	5 mg a las 23 horas CAMBIOS :	27/03//	3
ENOXAPARINA CLEXANE 20 mg JGA	SUBCUTANEA CONFIRMAR : SI NO	20 mg cada 24 horas CAMBIOS :	27/03//	3
ATENOLOL 25 mg CAPS	ORAL CONFIRMAR : SI NO	25 mg cada 24 horas CAMBIOS :	27/03//	3

OTRAS ORDENES

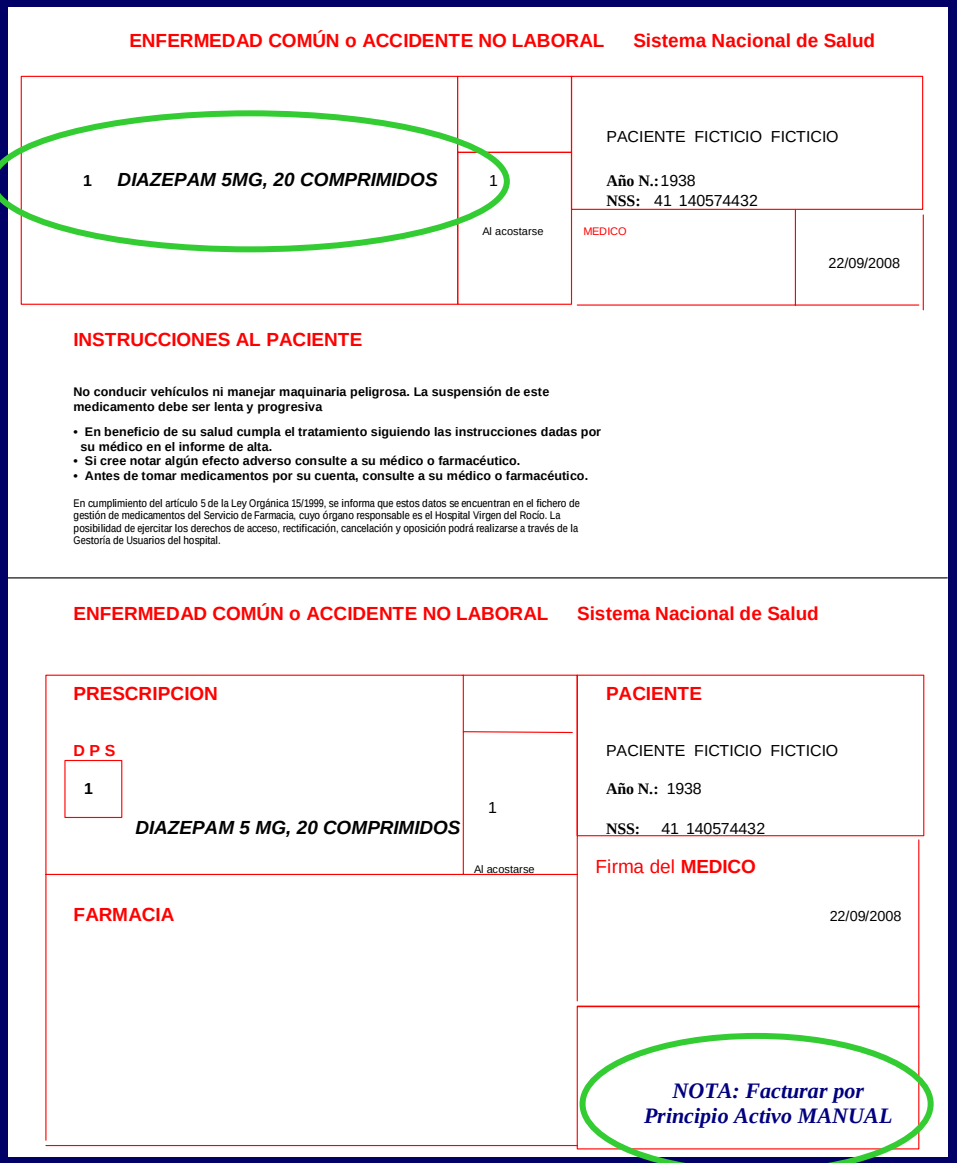
Dieta blanda hipocal
Tazocel 4 g/ IV / 8 horas.

Dr.: Reina Campos Fecha: 30/03/07
Firma: Cod: 3393 Hora.: 12:30
Pendiente hasta...
Alta
Precisa recetas activo / pensionista

El farmacéutico “checkea” dicho tratamiento con el “informe de alta” (intranet)



- Emisión de recetas al alta por P.A. (aplicación de Unidosis)
- Instrucciones al farmacéutico comunitario (fact. por P.A.)



ENFERMEDAD COMÚN o ACCIDENTE NO LABORAL Sistema Nacional de Salud

1 *DIAZEPAM 5MG, 20 COMPRIMIDOS* | 1 Al acostarse

PACIENTE FICTICIO FICTICIO

Año N.:1938
NSS: 41 140574432

MEDICO

22/09/2008

INSTRUCCIONES AL PACIENTE

No conducir vehículos ni manejar maquinaria peligrosa. La suspensión de este medicamento debe ser lenta y progresiva

- **En beneficio de su salud cumpla el tratamiento siguiendo las instrucciones dadas por su médico en el informe de alta.**
- **Si cree notar algún efecto adverso consulte a su médico o farmacéutico.**
- **Antes de tomar medicamentos por su cuenta, consulte a su médico o farmacéutico.**

En cumplimiento del artículo 5 de la Ley Orgánica 15/1999, se informa que estos datos se encuentran en el fichero de gestión de medicamentos del Servicio de Farmacia, cuyo órgano responsable es el Hospital Virgen del Rocío. La posibilidad de ejercitar los derechos de acceso, rectificación, cancelación y oposición podrá realizarse a través de la Gestoría de Usuarios del hospital.

ENFERMEDAD COMÚN o ACCIDENTE NO LABORAL Sistema Nacional de Salud

PRESCRIPCION

D P S

1 *DIAZEPAM 5 MG, 20 COMPRIMIDOS* | 1 Al acostarse

PACIENTE

PACIENTE FICTICIO FICTICIO

Año N.: 1938

NSS: 41 140574432

Firma del **MEDICO**

22/09/2008

FARMACIA

NOTA: Facturar por Principio Activo MANUAL

Informe para el médico de familia con el tratamiento prescrito al alta

INFORME DE RECETAS AL ALTA

SERV. FARMACIA - H.U.V.ROCIO

Servicio: HEM ***Cama:*** 215-2 ***NHC:*** 1025685

Μαρια Δολορεσ Μαρτιν Βλανχοκνδʃιπωβσ

F. Nacimiento: 15/05/1968 ***Tipo Aportacion:*** **PENSIONISTA**

Se envian: ***Recetas: Entregar al Médico para firmarlas***
Etiquetas identificativas: Para entregar en la Oficina de Farmacia

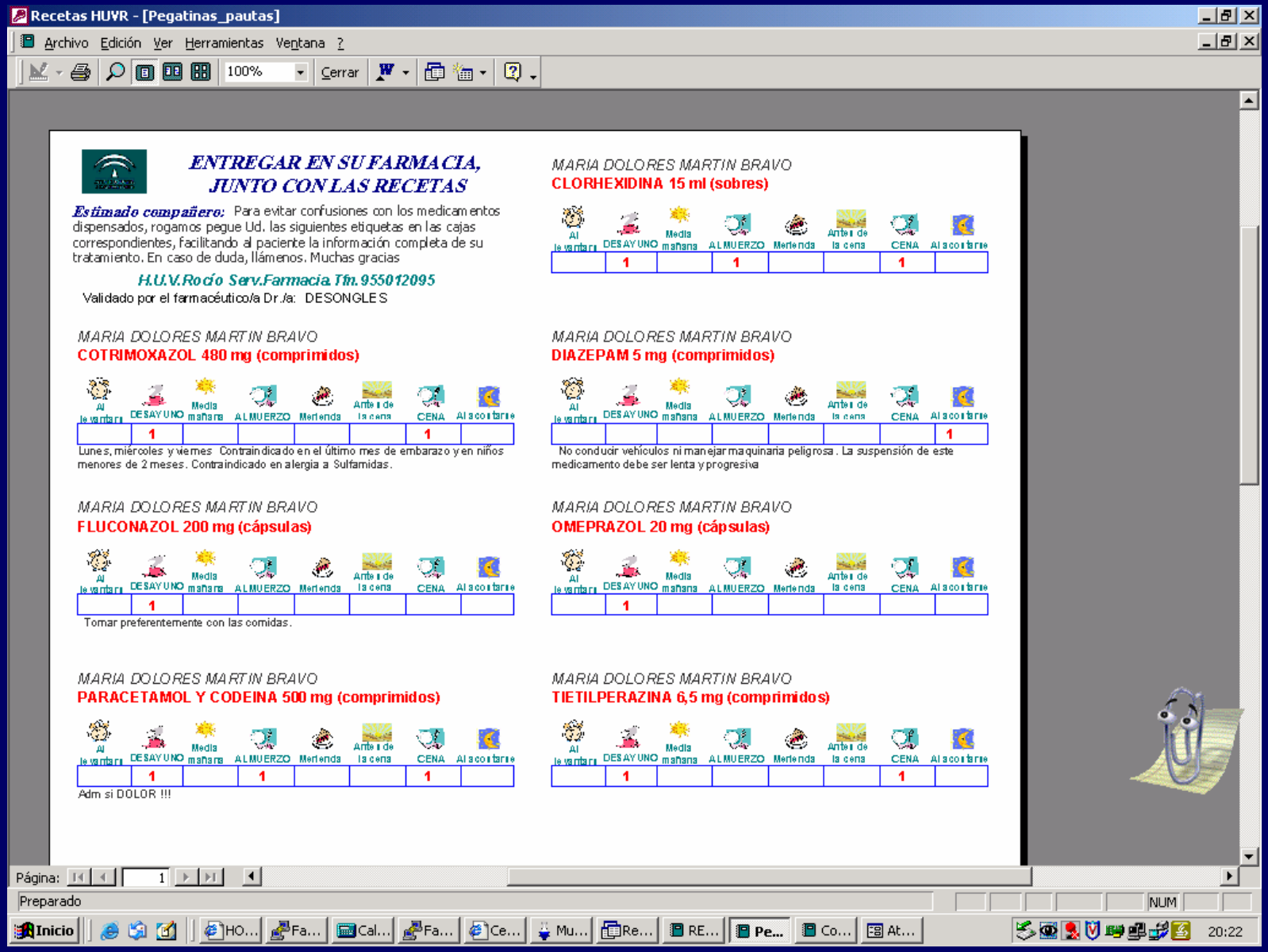
Por favor, entregue este informe a su médico de familia

DIAZEPAM 5MG, 20 COMPRIMIDOS	*Al acostarse (24h)*
FLUCONAZOL 200MG, 7 CAPSULAS	*Cada 24 horas*
OMEPRAZOL 20MG, 28 CAPSULAS	*En el desayuno*
PARACETAMOL 500MG / CODEINA 15MG, 30	*Cada 8 horas*
SULFAMETOXAZOL 800MG / TRIMETOPRIMA 160MG, 20	*Cada 12 horas*
TIETILPERAZINA BIMALATO 6,50MG, 20 GRAGEAS	*Cada 12 horas*

No está financiado: tendrá que abonarlo en su Farmacia

CLORHEXIDINA 15 ml sobres	*Desayuno - Almuerzo - Cena*

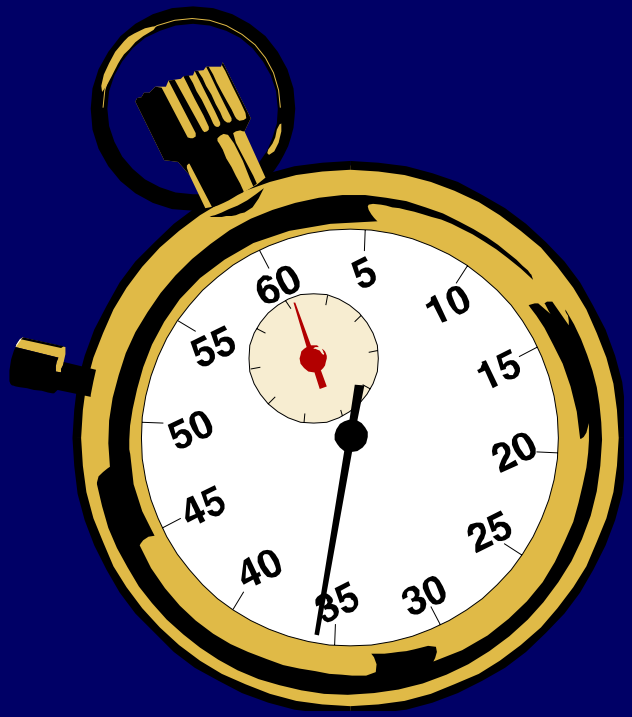
Instrucciones al paciente generadas por la aplicación de Unidosis, con esquema posológico gráfico



Registro de las intervenciones realizadas

CONCLUSIONES

- La transición entre distintos niveles o ubicaciones asistenciales constituye la principal fuente de errores de medicación
- El proceso de CONCILIACIÓN puede poner de manifiesto y evitar dichos errores
- La CONCILIACIÓN AL ALTA es especialmente importante porque puede evitar que un error se perpetúe en el tiempo (en un ámbito donde es más difícil su detección, A.P.)
- La CONCILIACIÓN AL ALTA debe entenderse como un proceso INTEGRAL, que se inicia en el momento del ingreso, y que utiliza todas las herramientas, registros y ayudas disponibles
- El REGISTRO SISTEMÁTICO de las intervenciones relacionadas con el proceso de CONCILIACIÓN permite cuantificar la magnitud del problema y poner de manifiesto la actividad del farmacéutico.



Gracias!