WA Paediatric Inpatient Medication Chart & Paediatric Long-Stay Medication Chart

Introduction and Rationale

Safer prescribing, dispensing and administration of medicines to minimise patient harm

Objectives

The objectives of this session is to provide you with an understanding of:

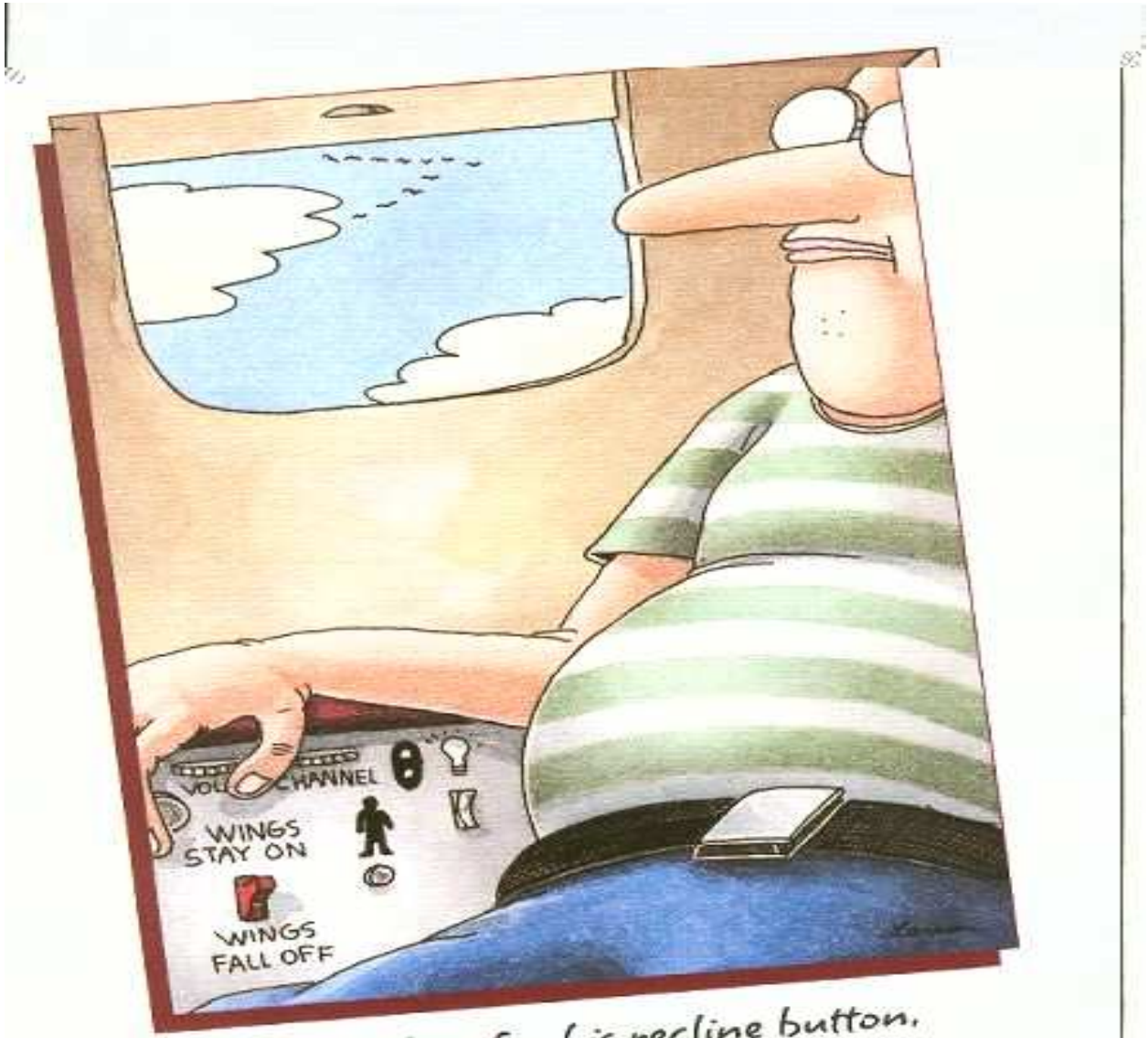
- why a standardised chart is needed;
- the benefits of a standardised chart;
- the main features of the chart.

Principles

- We all make errors

"all human beings without exception whatsoever, make errors….. And such errors are a completely normal part of human cognitive function"

Allnutt M.F. Human factors in accidents. *Br J Anaesth*. Jul 59(7):856-64, 1987.



Fumbling for his recline button, Ted unwittingly instigates a disaster.

Fact:

- We are making a significant number of errors when prescribing, dispensing, documenting and administering drugs

The Washington Post

Tuesday, July 29, 2003

Donald M. Berwick

Invisible Injuries

We need a better system for tracking and preventing medical errors.

The Institute of Medicine, our nation's most respected adviser on medical science, says that at least 100 patients will die in hospitals in the United States today because of injuries from their care, not from their diseases.

How many will die tomorrow?

Tom Nolan, one of the leading quality-improvement scholars of our time, identifies three essential preconditions for improvement of anything: will, ideas and execution. When it comes to reducing medical errors, America's will and ideas are increasing steadily now, following the Institute of Medicine's lead.

And yet, so far I see no evidence that health care in the United States is becoming safer. The ingredient we seem to be missing most is the third one on Nolan's list: execution. Who will change the care? And when? At least four major roadblocks appear to lie between will and ideas, on the one hand, and execution, on the other.

First, in local hospital settings, our health care workforce largely remains blind to the enemy—patient injury. People who work in hospitals and clinics cannot easily see, day by day, the errors and injuries that large-scale research studies have found.

A simple calculation shows why: If 100 patients die from injuries in U.S. hospitals each day and there are 5,000 hospitals, that is very roughly one death per hospital every two months. From the viewpoint of individual doctors and nurses, this is an unobservably low rate, even if every death caused by error is known to be so, which is far from the case.

It's like most public health burdens. About 43,000 Americans die every year in automobile accidents, but most of us never actually witness such a death.

Of course, nonlethal injuries to patients are far more frequent, like "fender benders," but for so-

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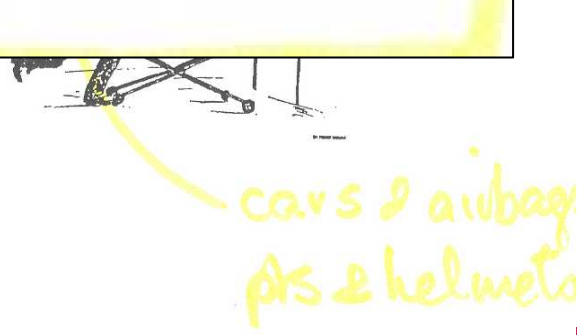
doing what other competent, caring people would do.

■ They believe that analyzing errors will allow them to find a single root cause, even though in fact the very idea of a "root cause" is misleading. Most system failures come from complex interactions between latent failures (the little things that go wrong all the time) and specific actions. Saying that one factor is a "root cause" is usually an illusion created by hindsight bias. It is Monday morning quarterbacking.

■ They believe that adding complexity improves reliability

tant hope for long-term returns or vague calculations about how much patient injuries are costing today don't often seem to carry the day in hospitals and clinics facing large and immediate financial losses.

Finally, improving safety is hard, not easy. A hospital that wants to make patients truly safer has to involve almost all departments, support systems and patterns of activity. Dozens of habitual



cars & airbags
ps & helmets

More deaths blamed on medical error

Tom Noble
Health Editor

More than one death a week reported to the Coroner by Victorian hospitals may be due to medical mistakes, according to a new investigative unit based at the Coroner's office.

In the first six months of this year, the Victorian Institute of Forensic Medicine identified about 30 cases in which medical errors may have caused or contributed to the patient's death, said the unit's acting director, David Ranson.

"About 20 cases a week come from hospitals. Of those we would probably pick up one or two a week that need in-depth analysis," Dr Ranson said.

The Age revealed yesterday that the state's hospitals reported to the Health Department 16 deaths due to medical mistakes for the year to June 30, 2003, the second year hospitals have been required to report such incidents.

Almost a dozen other people suffered injury due to medical staff treating the wrong patient or body part, instruments being left behind after surgery and neurological damage.

A range of errors led to the deaths, including three cases in which patients, including a child, were given the wrong medication. Medical experts regard the 16 reported deaths as only a small proportion of the actual number.

Dr Ranson said about 4000 deaths in Victoria were reported to the Coroner each year, including about 1000 from hospitals.

By law, hospitals must report to the Coroner cases that involve trauma, accident, people in care, a sudden natural death or an unexplained death. "We know there is a level of under-reporting to the Coroner as well," Dr Ranson said.

The investigations by the clinical liaison unit — set up late last year — were independent of the Health Department and would reinforce confidence in the Coroner's office, Dr Ranson said.

He said the unit's weekly examination of cases would counter criticism that suspected medical error cases were slow to be investigated. "Instead of being looked at the end of the process, they are being looked at near the start of the process."

The six-member unit, which includes two doctors and two nurses, advised which medical specialists should be consulted for expert advice. "They go out and help police investigators ask the right questions from the beginning." If medical error was suspected, an inquest would follow.

Dr Ranson said that in most medical error cases, individual doctors or nurses could not be blamed. "The reality is most of the issues are system issues," he said.

A key aim of the unit was to identify structural issues that would prevent incidents recurring, and provide hospitals with research findings to help them eliminate mistakes.

He said if the unit used broader guidelines to determine whether a medical error possibly contributed to a death, it could investigate 150 deaths a year. "If you take a middle view it might be 60," he said.

Australian Medical Association federal vice-president Mukesh Haikerwal said that the deaths reported by hospitals in 2002-03 needed to be put in the context of more than one million people seeking hospital treatment in the same period.

"We are at the safest time in history to be in hospital and have procedures done, but there's always room for improvement," he said. "One death is one too many, and 16 is 16 too many."

Dr Haikerwal said the State Government needed to ensure that medical equipment in hospitals was at a high standard to help prevent medical mistakes. "A lot of things need refurbishing and replacing," he said.

The Government said yesterday it would not release information on which hospitals were involved in medical errors as it did not want to encourage a safety "league table".

"The emphasis of the program is to identify systems shortcomings and issues — not to

Ref:

The Age Newspaper

12 August 2003

Government of **Western Australia**
Department of **Health**

- Estimated that:
  - 140,000 hospital admissions each year are associated with medication problems.
  - medication errors account for up to 20% of adverse events in Australian health care and
  - medication errors cost $380 million per year in the public hospital system.

Australian Council for Safety & Quality in Health Care, "Second National Report on Medication Safety", 2002, Commonwealth Dept of Health, Canberra

Principles

- We need to design systems to reduce the potential for error

"Human beings make mistakes because the systems, tasks and processes they work in are poorly designed"

Prof. Lucian Leape, Harvard School of Public Health

So what are we doing to reduce medication errors?

- Establishment of WA Medication Safety Group
- Distributed alerts on high risk medications eg. KCl (2005), Vincristine (2006)
- Implemented WA Pharmaceutical Review Policy (2007)
- Implementation of a national standardised Adult inpatient medication chart (2006)
- Implementation of Medication reconciliation program in SQuIRe program (2006)
- Implementation of a Paediatric Inpatient Medication Chart and Paediatric Long-Stay Medication Chart in WA Hospitals (2009)

Standardised Paediatric Medication Charts

- Australian Commission on Safety and Quality in Health Care considers the introduction of a common medication chart a significant quality improvement strategy, through
  - standardising processes of communication
  - optimising workflow patterns
  - introducing functions to improve safe use of medicines

Background to the Paediatric Inpatient Medication Chart

- July 2003, Australian Council for Safety and Quality in Health Care established a multidisciplinary working group to look at medication errors
- April 2004, Australian Health Ministers' Conference agreed that a common medication chart be in use in all public hospitals by June 2006
- December 2008, Australian Health Ministers' Conference endorsed National Paediatric Medication Chart and National Paediatric Long-Stay Chart for use in public general hospitals in Australia whenever paediatric patients are treated

Timelines for Implementation of the Paediatric Inpatient Medication Chart

- Jan – March 2009, WA Paediatric Medication Chart and Paediatric Long-Stay Chart developed
- Stakeholder consultation – April 2009
- Implementation of Paediatric Medication Chart at PMH - July 2009
- State rollout of Paediatric Medication Chart and Paediatric Long-Stay Chart - commence August 2009
- Complete implementation of the Paediatric Medication Chart and Paediatric Long-Stay Chart in WA public hospitals - December 2009

The WA Paediatric Inpatient (Short-Stay) Medication Chart - front and back pages

PAEDIATRIC SHORT-STAY MEDICINE CHART ..... of .....

Facility/Service:_____

Ward/Unit:.....

ADDITIONAL CHARTS
☐ IV Fluid ☐ BGL/Insulin ☐ Acute Pain/P.C.A. ☐ Post op N&V
☐ Inhalation ☐ Chemotherapy ☐ Palliative Care ☐ Other _____

ONCE ONLY MEDICINES

Date Prescribed	Medicine (Print Generic Name)	Route	DOSE	Date/Time to be given	Prescriber Signature	Prescriber Print Name	DOSE calc e.g. mg/kg per DOSE	Given by	Date/Time Given	Pharm

TELEPHONE ORDERS (To be signed within 24 hrs of order)

Date Time	Medicine (Print Generic Name)	Route	Dose	Frequency	Nurse Initials Nr 1/Nr 2		Dr Name	Dr Sign	Date	RECORD OF ADMINISTRATION Time/Given by:			

INITIALS All staff please print name and designation beside your initials

Initials	Print name and designation	Initials	Print name and designation	Initials	Print name and designation

Medicines taken Prior to Presentation to Hospital (Prescribed, over the counter, complementary) Own medicines brought in? ☐ Y ☐ N

Medicine & Formulation	Dose & Frequency	Duration	Medicine & Formulation	Dose & Frequency	Duration

NOT FOR ADMINISTRATION

Doctor/GP: | Community Pharmacy:

Documented by: (Sign) (Date) Medicines usually administered by:

Hospital Prescription

All doses need units of measure. eg mL, mg, unit, microgram

PAEDIATRIC SHORT-STAY MEDICINE CHART
Version 2, June 2009

NOT A VALID ORDER UNLESS LEGIBLE

AS REQUIRED "PRN" MEDICINES

Attach ADR Sticker

See front page for details

AFFIX PATIENT IDENTIFICATION LABEL HERE AND OVER LEAF

UR No.:

Family Name: NOT A VALID PRESCRIPTION UNLESS IDENTIFIERS PRESENT

Given Names:

D.O.B.: Sex: ☐ M ☐ F

Ward/Unit:_____ Weight (kg) Date

1st Prescriber to Print Patient Name and Check Label Correct:.....

Date | Medicine (Print Generic Name) | Date

Route | DOSE | Hourly Frequency | PRN | Max DOSE/24 hrs | Time

Pharmacy/Additional Information | DOSE

Indication | Calculation of Dose (eg. mg/kg/DOSE) | Route

Prescriber Signature | Print Name | Contact/Pager | Sign

*Continue on discharge Yes / No Dispense Yes / No Duration?.....days/Qty?..... Date.....Pharmacist.....Pager.....Print Name.....Prescriber's Signature.....

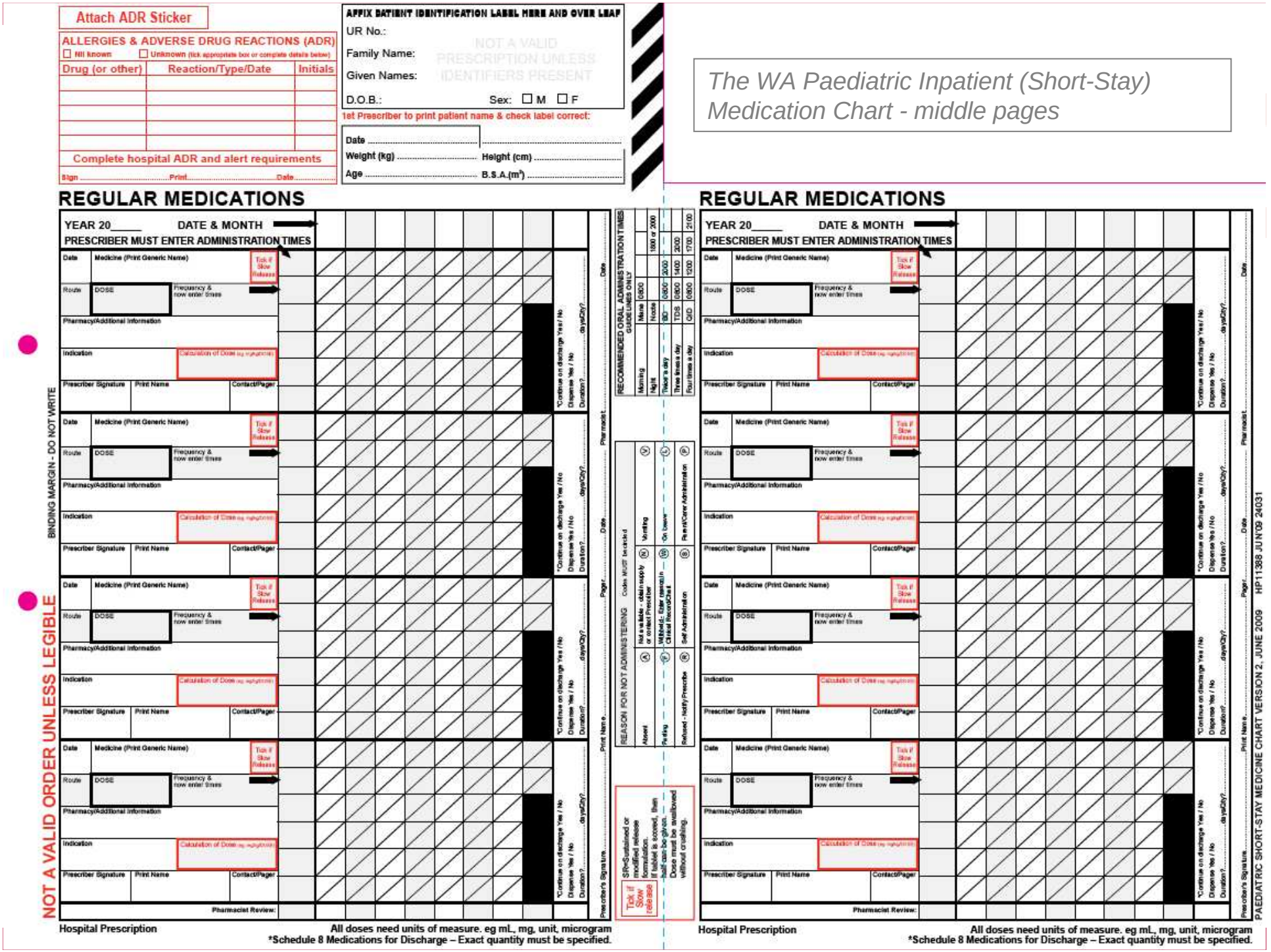
BINDING MARGIN - DO NOT WRITE

Hospital Prescription

All doses need units of measure. eg mL, mg, unit, microgram

*Schedule 8 Medications for Discharge – Exact quantity must be specified.

The WA Paediatric Inpatient (Short-Stay) Medication Chart - middle pages



The WA Paediatric Long-Stay Medication Chart – front and back pages

PAEDIATRIC LONG-STAY MEDICINE CHART .... of ....

Facility/Service:________________________

Ward/Unit:...

ADDITIONAL CHARTS
☐ IV Fluid ☐ BGL/Insulin ☐ Acute Pain/P.C.A. ☐ Post op N&V
☐ Inhalation ☐ Chemotherapy ☐ Palliative Care ☐ Other ______________

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Date Time	Medicine (Print Generic Names)	Route	Dose	Frequency	Nurse Initials Nr 1/Nr 2		Dr Name	Dr Sign	Date	RECORD OF ADMINISTRATION			
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Hospital Prescription All doses need units of measure. eg mL, mg, unit, microgram

PAEDIATRIC LONG - STAY MEDICINE CHART
Version 2, June 2009

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AS REQUIRED "PRN" MEDICINES

Attach ADR Sticker

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Given Names:

D.O.B.: Sex: ☐ M ☐ F

NOT A VALID PRESCRIPTION UNLESS IDENTIFIERS PRESENT

Ward/Unit:______________ Weight (kg) Date

1st Prescriber to Print Patient Name and Check Label Correct:..

Date	Medicine (Print Generic Name)			Date										
Route	DOSE	Hourly Frequency PRN	Max DOSE/24 hrs	Time										
Pharmacy/Additional Information				DOSE										
Indication		Calculation of Dose (eg. mg/kg/DOSE)		Route										
Prescriber Signature	Print Name	Contact/Pager		Sign										

*Continue on discharge Yes / No
Dispense Yes / No
Duration?........days/Qty?........

Date	Medicine (Print Generic Name)			Date										
Route	DOSE	Hourly Frequency PRN	Max DOSE/24 hrs	Time										
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Duration?........days/Qty?........

Date.................. Pharmacist.................. Date.................. Pager.................. Print Name.................. Prescriber's Signature..................

BINDING MARGIN - DO NOT WRITE

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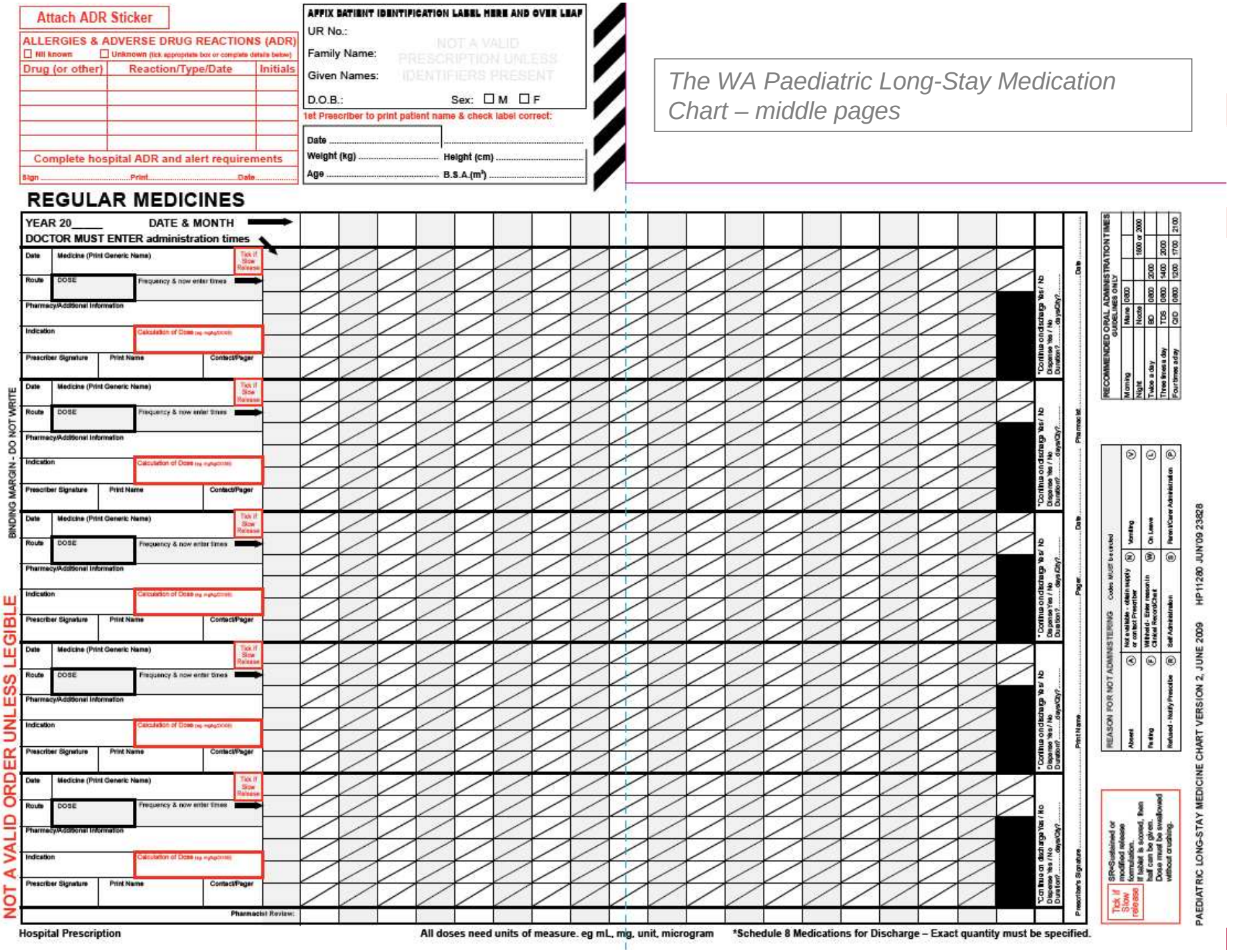
The WA Paediatric Long-Stay Medication Chart – middle pages



Paediatric Inpatient Medication Chart

- Paediatric Inpatient Medication Chart and Paediatric Long-Stay Medication Chart are to be used for all paediatric Inpatients

- Paediatric Inpatient Medication Chart and Paediatric Long-Stay Medication Chart do not replace specialised medication charts but should be used in conjunction with them

    - E.g. Chemotherapy, insulin, IV Fluid

What safety features have been added to the Paediatric Inpatient Medication charts?

- Patient Identification eg UMR Number, Patient Name, Date of Birth and gender to be written on all Paediatric Charts OR use Patient Identification sticker
- Initial clinician (doctor/nurse) needs to print the patient's name under their ID label
- Staff need to record patient height, weight, BSA Index and age
- Discharge Medication panels added
- Staff signature/initial panel added to front page
- Added 'Calculation of Dose' cell to differentiate from 'Dose' box

NIMC - what it can do

Significantly reduce the types of errors we have identified

NIMC - what it can't do

Eliminate these errors

Success is dependent on

Clinicians recognising the importance of good communication through the medication chart

Where do I find more information?

www.safetyandquality.health.wa.gov.au/medication/index.cfm