

T.A.B.L.E.T.S

TABLETS ARE BAGGED LETTING EMERGENCY TREAT SAFELY

Ambulance Service Of New South Wales

Phill Good Patient Safety Manager

Darren Hoschke Station Manager

Katie Klarenaar Patient Safety Officer

October 2006

Mission

- Reduction of Ambulance Service of New South Wales patients transported to hospital without medications.

Background

- Ambulance of New South Wales (ASNSW) provides pre-hospital care and transport to a population of approximately six million people.
- During 2005 the total responses for ASNSW were over 947,000.
- Approximately 2,725 patients over 75 years of age were transported to Ryde Hospital.
- Approximately 80% of these cases were transported by ambulances from Ryde station.
- Ryde Hospital is a 170 bed acute facility situated approximately 20 minutes from the centre of Sydney.

Evidence of a problem worth solving

- Ryde Hospital Emergency Department staff have reported a high number of patients who were over 75 years of age arriving in the Emergency Department without their medications.
- Emergency Department staff have stated that the following problems are influenced by medications not arriving with patients:
 - Increased length of stay for patients in the Emergency Department.
 - Increased cycle time for patients.
 - Increased risk of adverse events occurring.
 - Increased length of stay in hospital.
 - Increased bed block in hospital wards.
 - Decreased ambulance availability due to bed block in the Emergency Department.

Aim

- To reduce the number of patients over 75 years of age transported by Ambulance Officers to Ryde Hospital without their medications by 100% in 6 months.

Methodology

A multi-disciplinary project team was formed to devise and implement solutions for the problem.

The team consisted of:

Dr Peter Roberts	Ryde Hospital, Director Emergency Medicine.
Robyn Gray	Ryde Hospital, Quality Risk Management Unit.
Diane Reeves	NSCCH, Medication Safety Pharmacist.
Phill Good	ASNSW, Patient Safety Manager.
Darren Hoschke	ASNSW, Station Manager.
Sheilah Harris	Consumer participant.

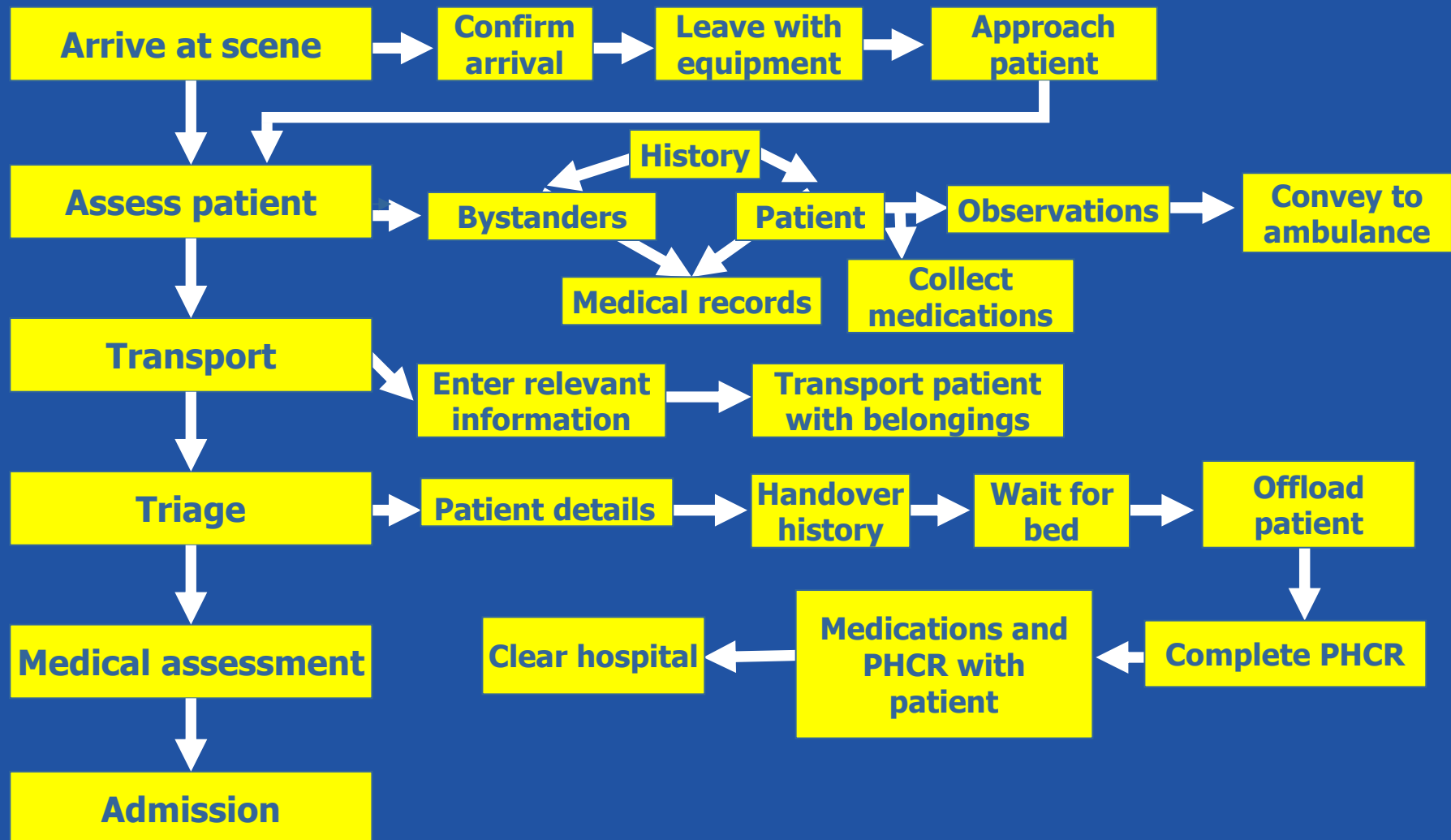
Planning & Implementation

Diagnostic Phase

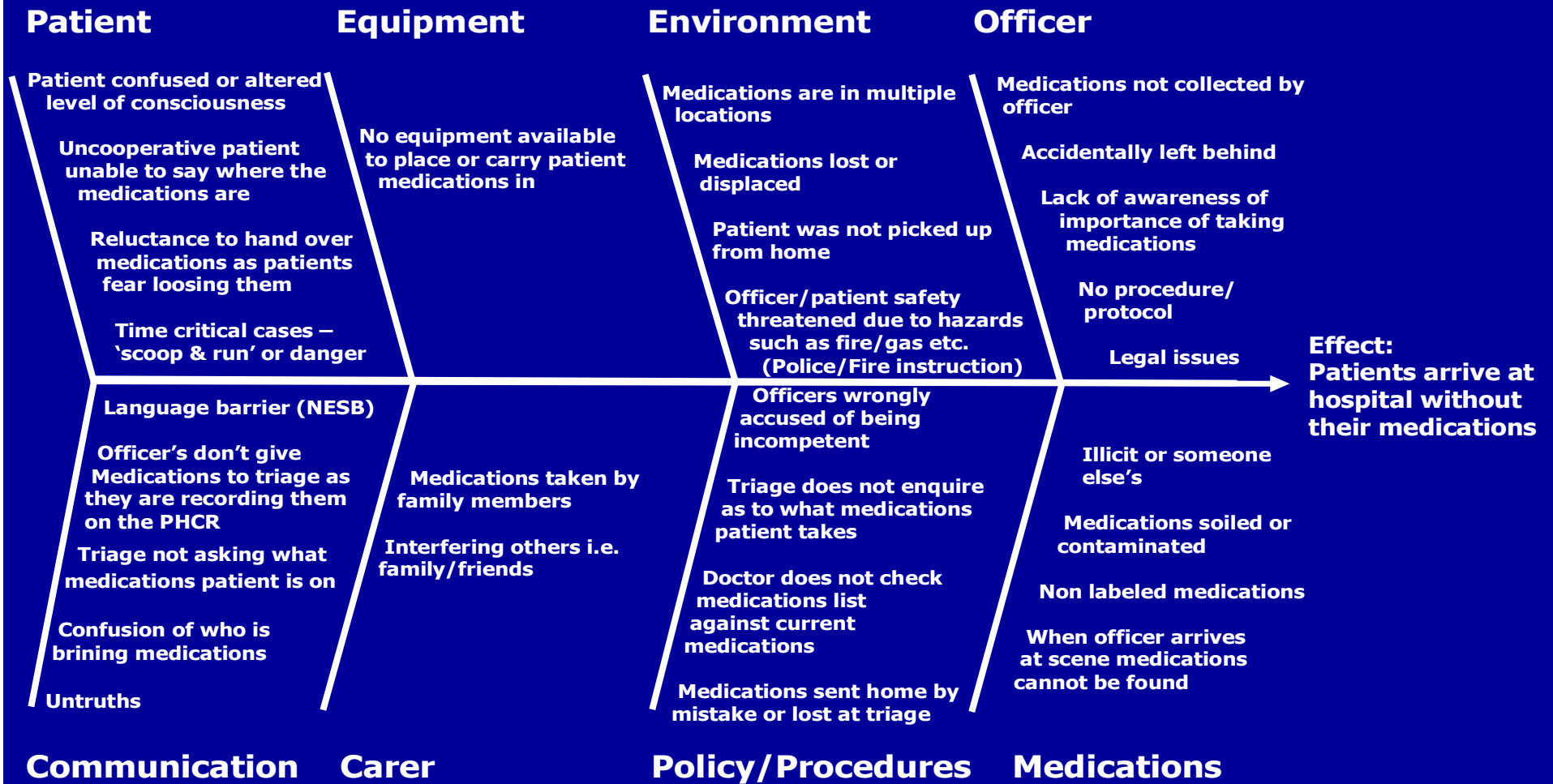
Using the clinical practice improvement methodology a diagnostic phase was undertaken. This included

- A flow chart of the process of ambulance arrival at residence to assessment/admission in hospital (Fig. 1)
- Cause and effect diagram relating to the high incidence of patients over 75 years of age arriving at hospital via ambulance transport without their medication (Fig. 2)
- Pareto disruption chart of the causes of non compliance of ambulance officers taking patients over 75 years of age medications to hospital (Fig. 3)

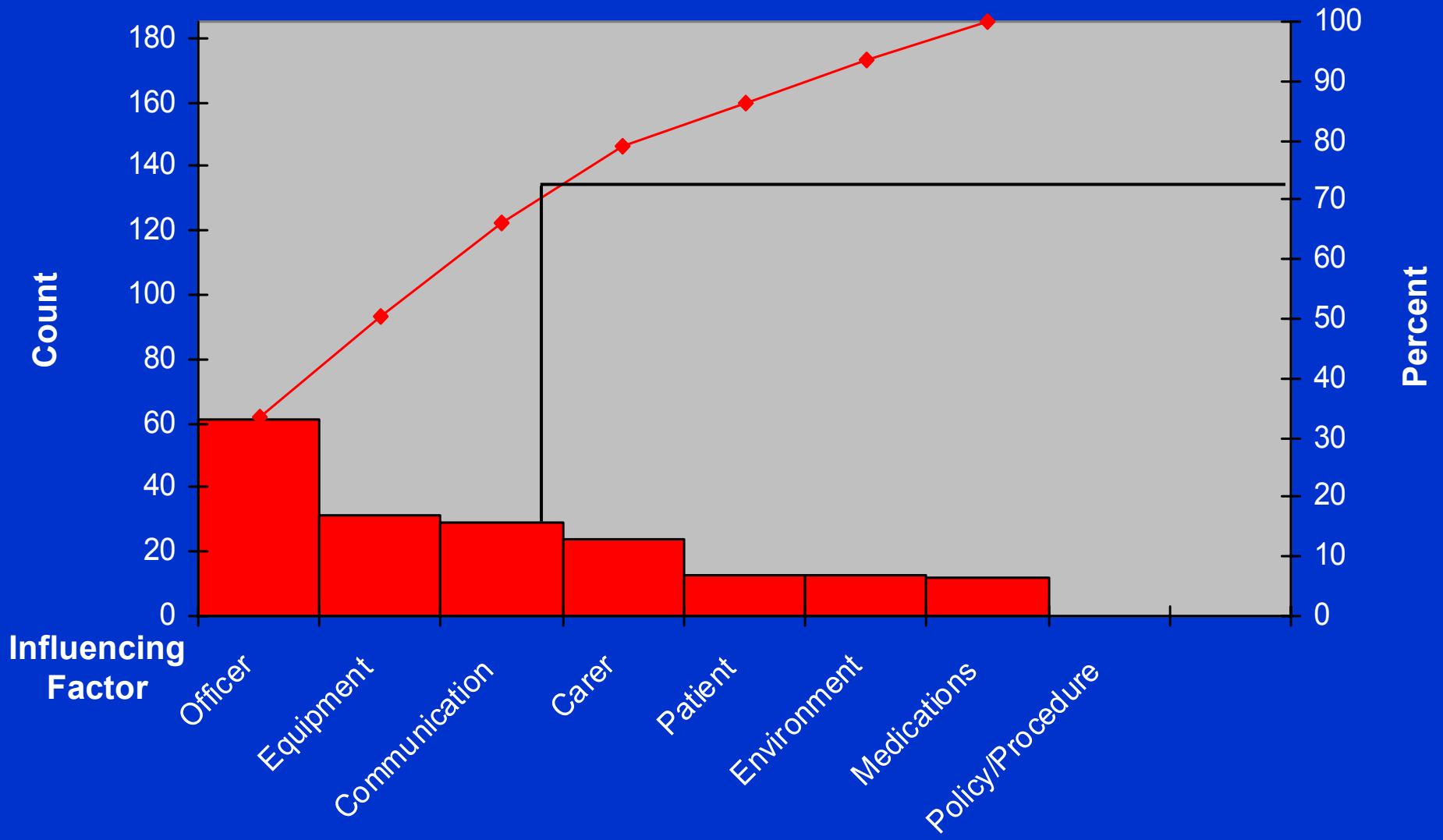
(Fig.1) High and low level flow chart of process



(Fig.2) Cause and effect diagram



(Fig. 3) Pareto distribution chart



Count	61	31	29	24	13	13	12	0
Percent	33.3	16.9	15.9	13.1	7.1	7.1	6.6	0
Cum%	33.3	50.2	66.1	79.2	86.3	93.4	100	0


Interventions

- Instructions for officers to include medications with patients who are over 75 years of age (week one).
- Equipping one ambulance with clear plastic bags to hold medications (week two).
- Equipping all ambulances with clear plastic bags to hold medications, with BP cuff stored in bag (week three).
- Instruction label included on bag (week six).
- Data field for recording “medications taken” stamped onto Patient Health Care Record (week ten).

Label for intervention



Label – Final Design

PATIENT NAME:	
DATE OF BIRTH:	
ALLERGIES:	
DATE:	
INCIDENT No:	
	Ambulance Service of New South Wales

Outcomes & Evaluation

- Week one of the project clearly indicated a high number of patients who were over 75 years of age arriving without their medications (fig. 4).
- Over the first three month period of the project the rate of medications taken with patients over 75 years of age had an overall increase.
- In the 10th, 11th and 12th weeks of the project the average number of patients who were over 75 years of age arriving with their medications at Ryde Hospital was 77%.
- Suggesting an improvement compared to the commencement period of the project (Fig. 4 & 5).
- Actual numbers also confirm this apparent trend (Fig. 6).

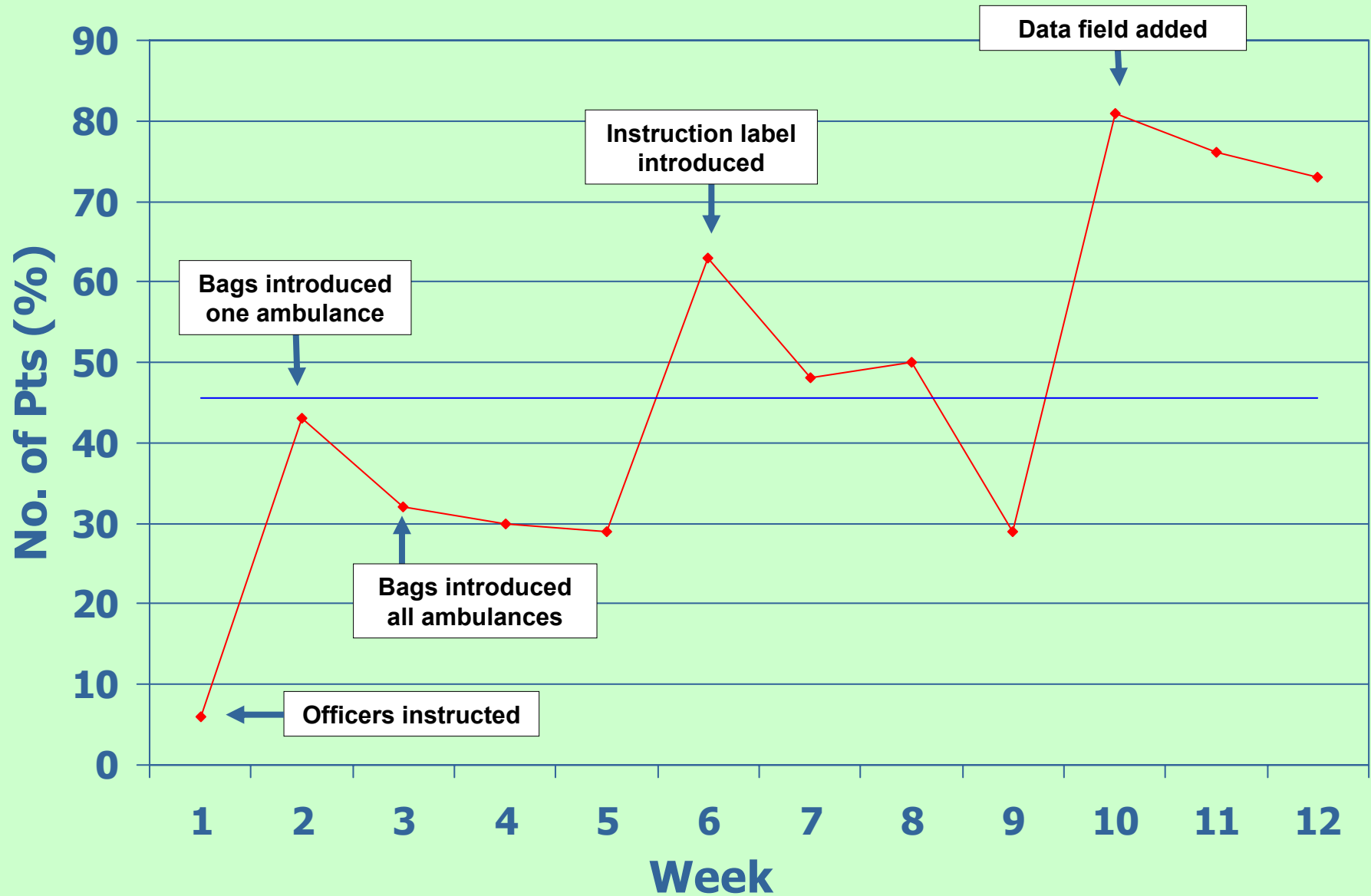
Data sheet (Fig. 4)

Number of patients > 75 yrs on medications arriving at Ryde Hospital

Week	1	2	3	4	5	6	7	8	9	10	11	12
Total arriving with medications	1	9	6	8	6	10	12	14	6	13	25	16
Total arriving	18	28	14	27	21	16	25	28	21	16	33	22
% Arriving with medications	6%	43%	32%	30%	29%	63%	48%	50%	29%	81%	76%	73%

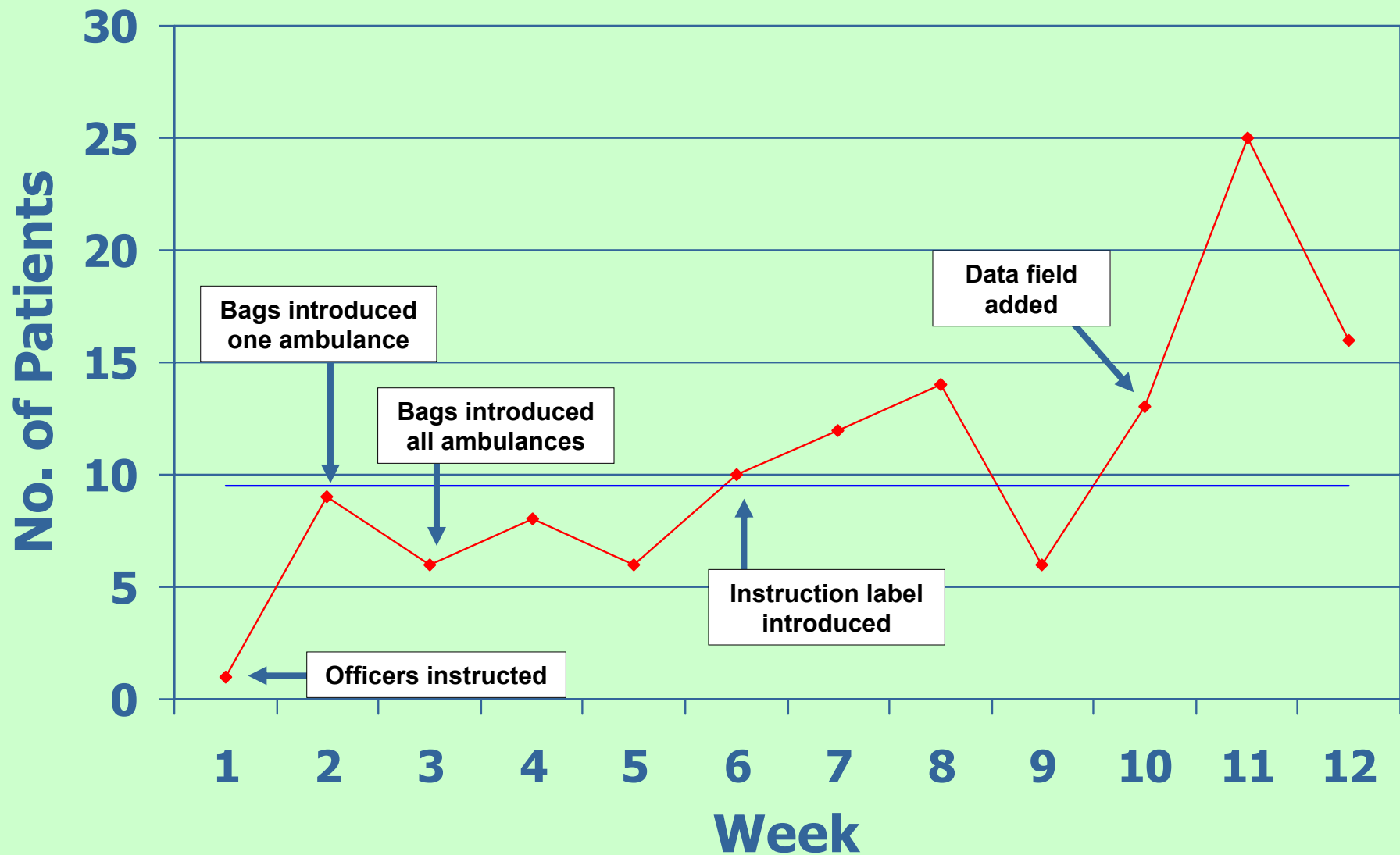
(Fig. 5) Run Chart

% Pts > 75 yrs arriving at Ryde with medications



(Fig. 6) Run Chart

Pts > 75 yrs arriving at Ryde with medications



Future Scope

Strategies for Sustaining Improvement

- Publicise project in ASNSW magazine “SIRENS”.
- Advise Divisional Clinical Quality Committees and State Clinical Governance Committee.
- Ambulance Education Centre to write a procedure.
- Data field added to next version of ASNSW Patient Health Care Record.
- ASNSW hospital liaison officers to inform all emergency departments of ambulance medication initiative.

Future Scope

Strategies for Spreading

- Statewide strategies for sustaining improvement
- Publish project in “RESPONSE” the journal of the Australian College of Ambulance Professionals
- Present Project at the Ambulance National Conference 2006
- Present Poster at AMBEX
- Liaise with all AHS Patient Safety Managers
- Seek endorsement for a national Key Performance Indicator with the Convention of Australian Ambulance Authorities

Acknowledgments

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