



醫院管理局  
HOSPITAL  
AUTHORITY

# Audit on Compliance to Physiotherapy Protocol for Geriatric Hip Fracture

Working Group on Physiotherapy Protocol for  
Geriatric Hip Fracture, PTCOC

# Introduction

- Hip fracture, particularly in old persons, result in problems that extend far beyond the orthopaedic injury.

Zuckerman J (1996) Hip fracture. *New England Journal of Medicine* 334: 1519-1525

# Geriatric Hip Fracture in HA

- **Fracture around the neck of femur (820) incurred a total episode of care of around 7000 in the year 2005 (Source: CDARS, HA).**
- **Geriatric hip fracture was among the top ten largest volume patient groups in physiotherapy service (Source: PTCOC, HA).**

# Physiotherapy Service Coverage to Geriatric Hip Fracture



Acute Care



Extended Care



Community Care



Ambulatory Care

# Physiotherapy Protocol for Geriatric Hip Fracture

- Assurance of the quality of service provided by physiotherapists to this group of patients.
- Enhance communication with other disciplines on the common physiotherapy practice.

# Physiotherapy Protocol for Geriatric Hip Fracture

- **Problem-oriented approach.**
- **Outlines usual practice of physiotherapy management in various settings, as supplementary to clinical judgment.**

# Physiotherapy Protocol for Geriatric Hip Fracture

- Formation of working group with representatives from the 7 clusters under PTCOC.
- Open forum to collect feedback on the process of compiling protocol.
- Endorsement of protocol in February 2005 after consultation and consensus.
- Protocol accessible in eKG.

**Followed by Territory Wide Documentation Audit**

# Purposes of Clinical Audit for Geriatric Hip Fracture Protocol

- To examine the compliance rate of individual physiotherapy department to the protocol.
- To make recommendations for improving protocol compliance and documentation.

# Methodology of the Audit

## Subjects

Medical Records of completed episode of care.

Inclusion criteria-

- Age  $\geq$  65
- Principal diagnosis: Hip Fracture

Exclusion criteria-

- Severe complications during hospitalization.
- Complicated co-morbid problems.

# Methodology of the Audit

## Auditors

- Professional staff.
- Not the treating therapist.
- Attended pre-audit briefing session.

# Methodology of the Audit

## Audit Tools

- Retrospective review of patient record.
- Content of document was rated against a set of audit criteria.
- 27 items for acute care, 26 items for extended care were rated.
- Results charted on a compliance audit form.

# Methodology of the Audit

## Audit Items

- Patient's demographic data
- Premorbid mobility
- Vital signs
- Chest conditions
- Screening of potential complications
- Precautions taken for immediate post-hemiarthroplasty
- Screening of unaffected limbs
- Mobility of affected leg
- Bed mobility, transfer, walking abilities
- Appropriate interventions/ training given according to patient's problems
- Appropriate documentation of outcome measurements

# Audit Form for Acute Care Phase

## Compliance Audit Form on Physiotherapy Protocol on Geriatric Hip Fracture (Acute Care)

Date of Audit: \_\_\_\_\_ Therapist Involved: \_\_\_\_\_

Patient Hospital Number: \_\_\_\_\_ Auditor(s): \_\_\_\_\_

Hospital: \_\_\_\_\_

Protocol Standards	Compliance				Protocol Standards	Compliance			
	Yes	No	N/A	Reasons for N/A		Yes	No	N/A	Reasons for N/A
<b>1 Pre-op/Immobilization stage assessment</b>					<b>3 Goal-specific interventions given</b>				
1.1									
1.2									
1.3									
1.4									
1.5					3.1				
1.6					3.2				
1.7									

<b>2 Post-op assessment - Maintenance Care/Intensive Rehab</b>									
Protocol Standards	Yes	No	N/A	Reasons for N/A	Protocol Standards	Yes	No	N/A	Reasons for N/A
2.1									
2.2									
2.3									
2.4									
2.5					3.3				
2.6					3.4				
					3.5				
2.7					3.6				
2.8					3.7				
2.9					3.8				
2.10									
2.11					3.9				

# hip audit form (acute phase) Sep 05

# Audit Form for Extended Care Phase

## Compliance Audit Form on Physiotherapy Protocol on Geriatric Hip Fracture (Extended Care)

Date of Audit: \_\_\_\_\_ Therapist Involved: \_\_\_\_\_

Patient Hospital Number: \_\_\_\_\_ Auditor(s): \_\_\_\_\_

Hospital: \_\_\_\_\_

Protocol Standards		Compliance			
1	General assessment	Yes	No	N/A	Reasons for N/A
1.1	Diagnosis (side of fracture)				
1.2	Diagnosis (type of fracture)				
1.3	Categorization by pre-morbid mobility status				
1.4	Date of operation				
1.5	Type of operation				
1.6	Weight bearing status as planned by MO				
1.7	EMS on admission				
1.8	EMS on discharge				

		Compliance						Compliance			
2A	Specific Assessment for low mobility status	Yes	No	N/A	Reasons for N/A	2B	Goal -specific Intervention given	Yes	No	N/A	Reasons for N/A
2.1A	Chest condition					2.1B	Chest physiotherapy				
2.2A	Bed mobility performance					2.2B	Bed mobility training				
3A	Specific assessment for high mobility status					3B	Goal -specific Intervention given				
3.1A	Range of movement of the operated hip					3.1B	Mobilization exercise				
3.2A	Muscle strength of the operated leg					3.2B	Strengthening exercise				
3.3A	Transfer performance					3.3B	Transfer training				
3.4A	Standing / Walking performance					3.4B	Standing/Walking training				
3.5A	Need of ambulatory aids					3.5B	Prescription of ambulatory aids				
3.6A	Balance performance for supervised walker					3.6B	Balance training				
3.7A	Skill in coping with outdoor environment for potential outdoor walker					3.7B	Outdoor gait /kerbs/stairs training				

# hip audit form (extended care) Sep 05

# Audit Results

# Audit Results - Acute Care

- 13 hospitals involved
- 277 audit subjects



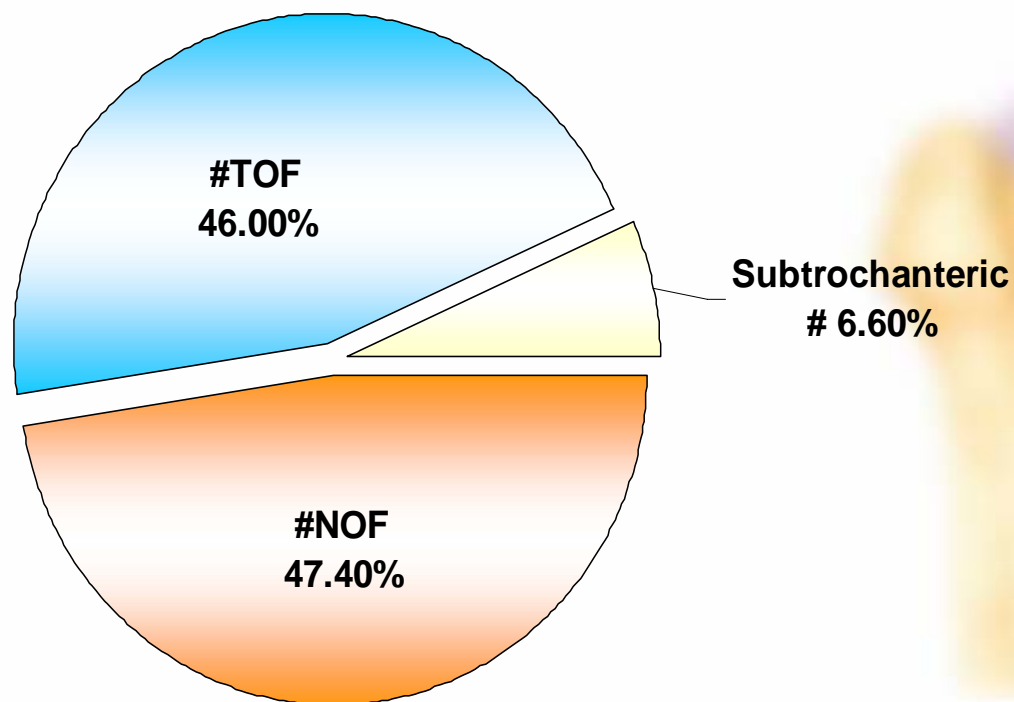
# Audit Results - Acute Care

## Baseline Data

Age: mean=81.2, SD=7.1 (range 65-99)

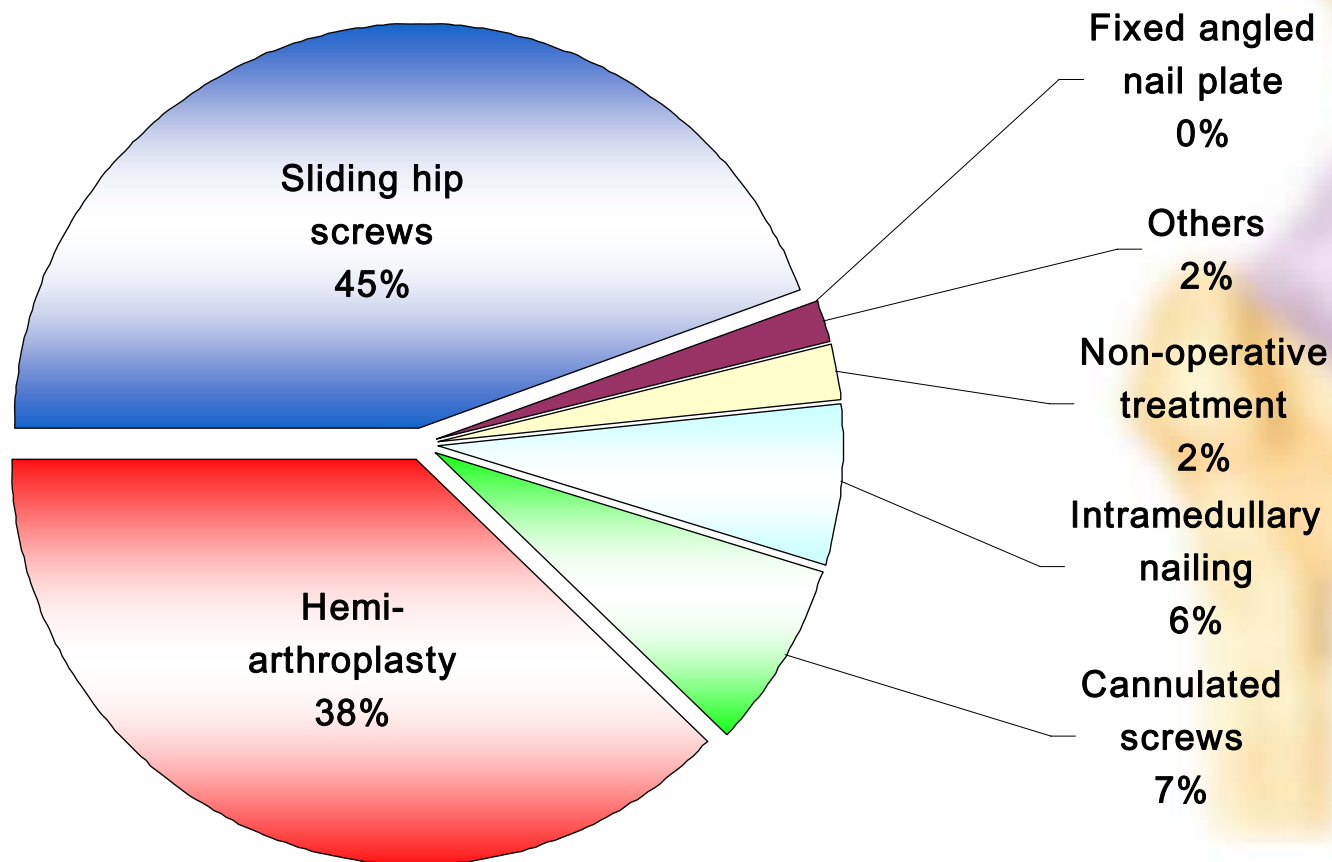
Gender: Male (32%), Female (68%)

Diagnosis:



# Audit Results - Acute Care

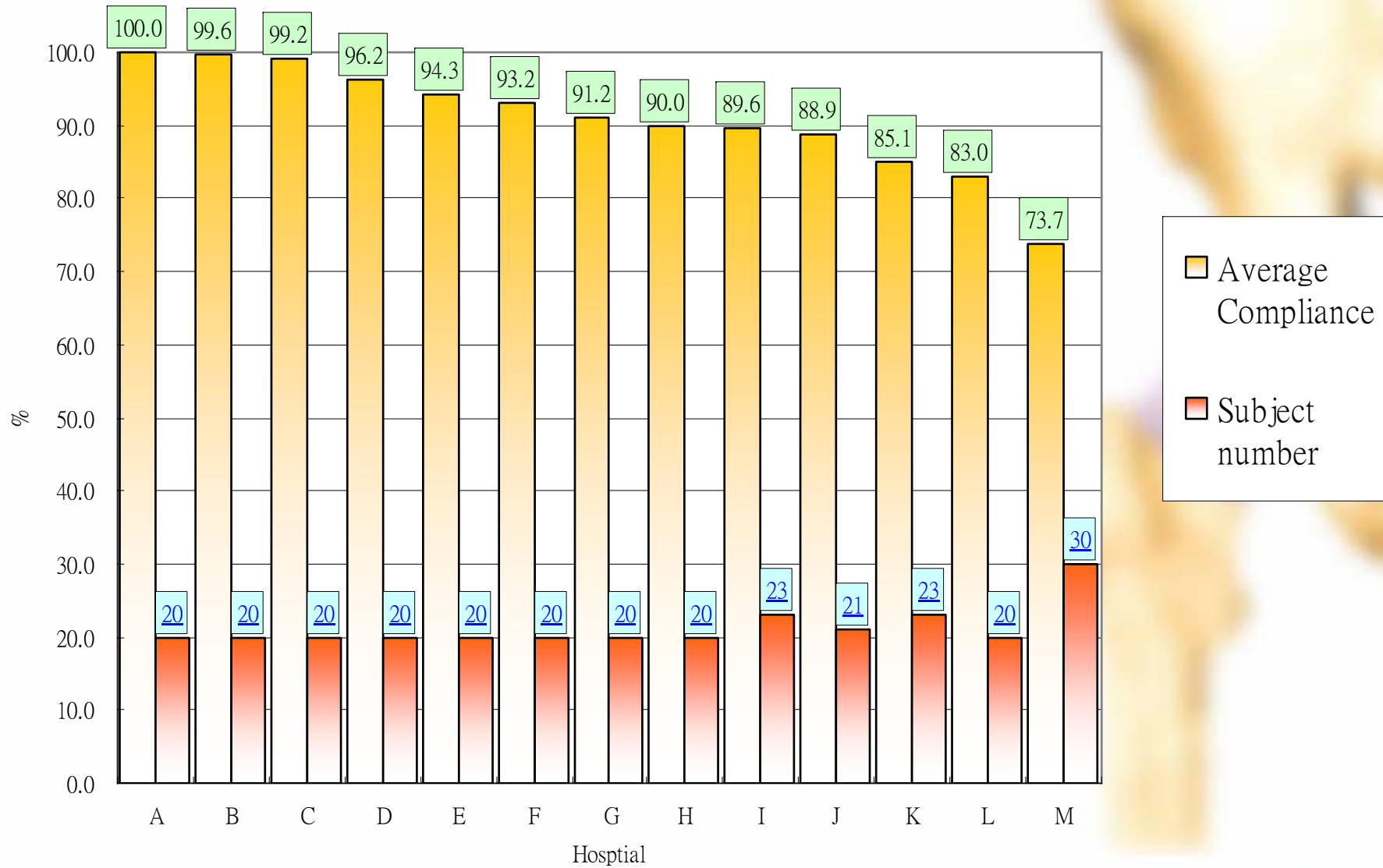
## Orthopaedic Intervention



# Audit Results - Acute Care

- 22 out of 27 items with compliance rate over 90%.
- Overall compliance rate of individual hospitals ranged from 73.7% to 100%.
- Average overall compliance rate was 91.1%.

## Acute Care Summary



# Audit Results – Extended Care

- 8 hospitals involved
- 162 audit subjects



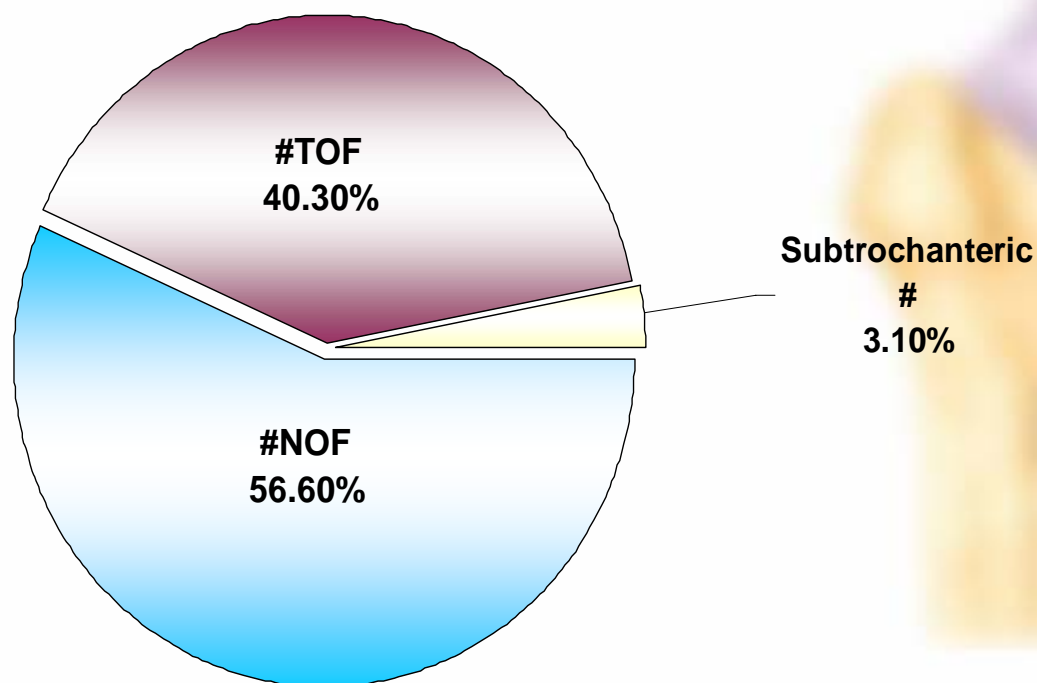
# Audit Results – Extended Care

## Baseline Data

Age: mean=81.6, SD=6.7 (range 65-96)

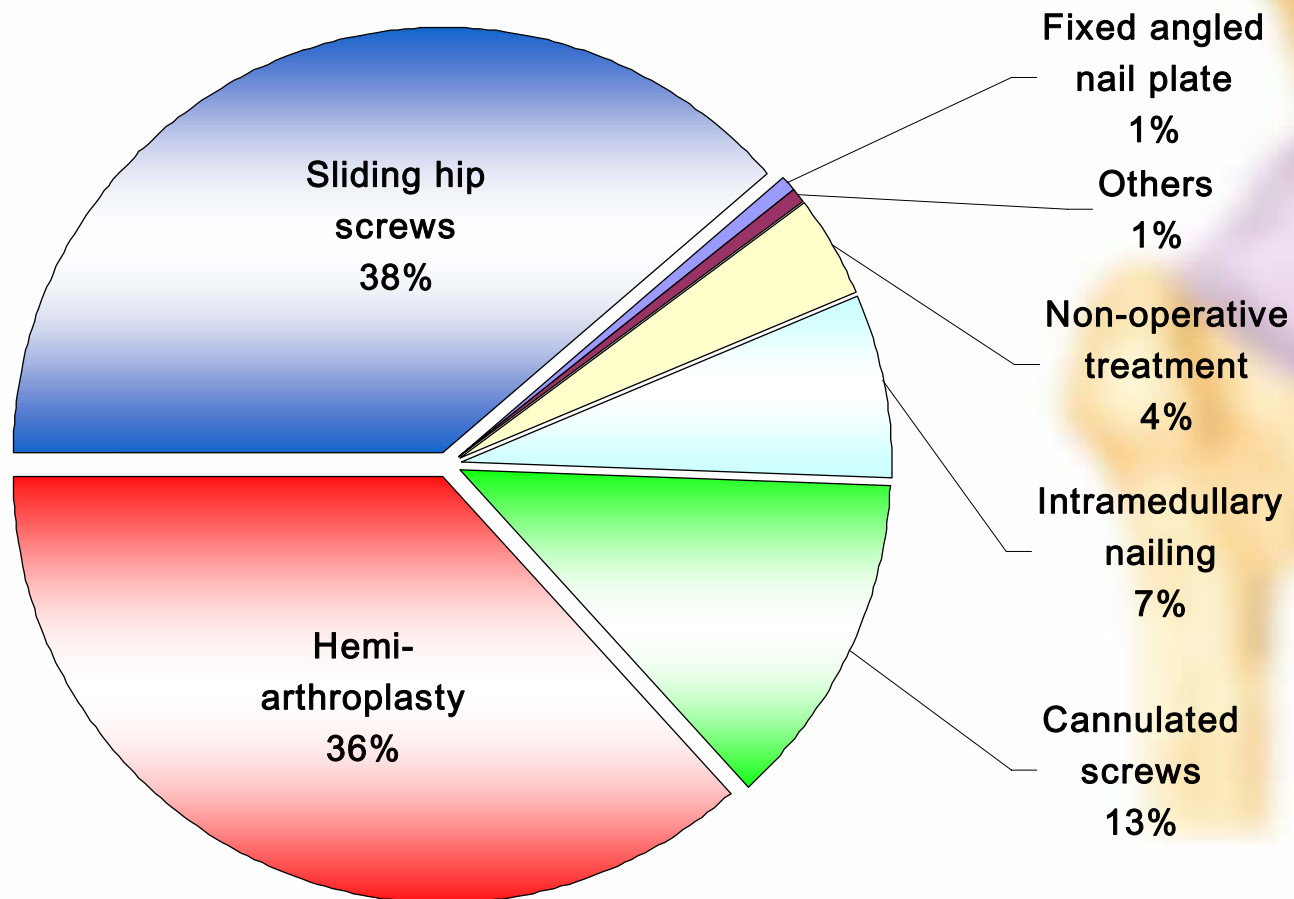
Gender: Male (28.9%), Female (71.1%)

Diagnosis:



# Audit Results – Extended Care

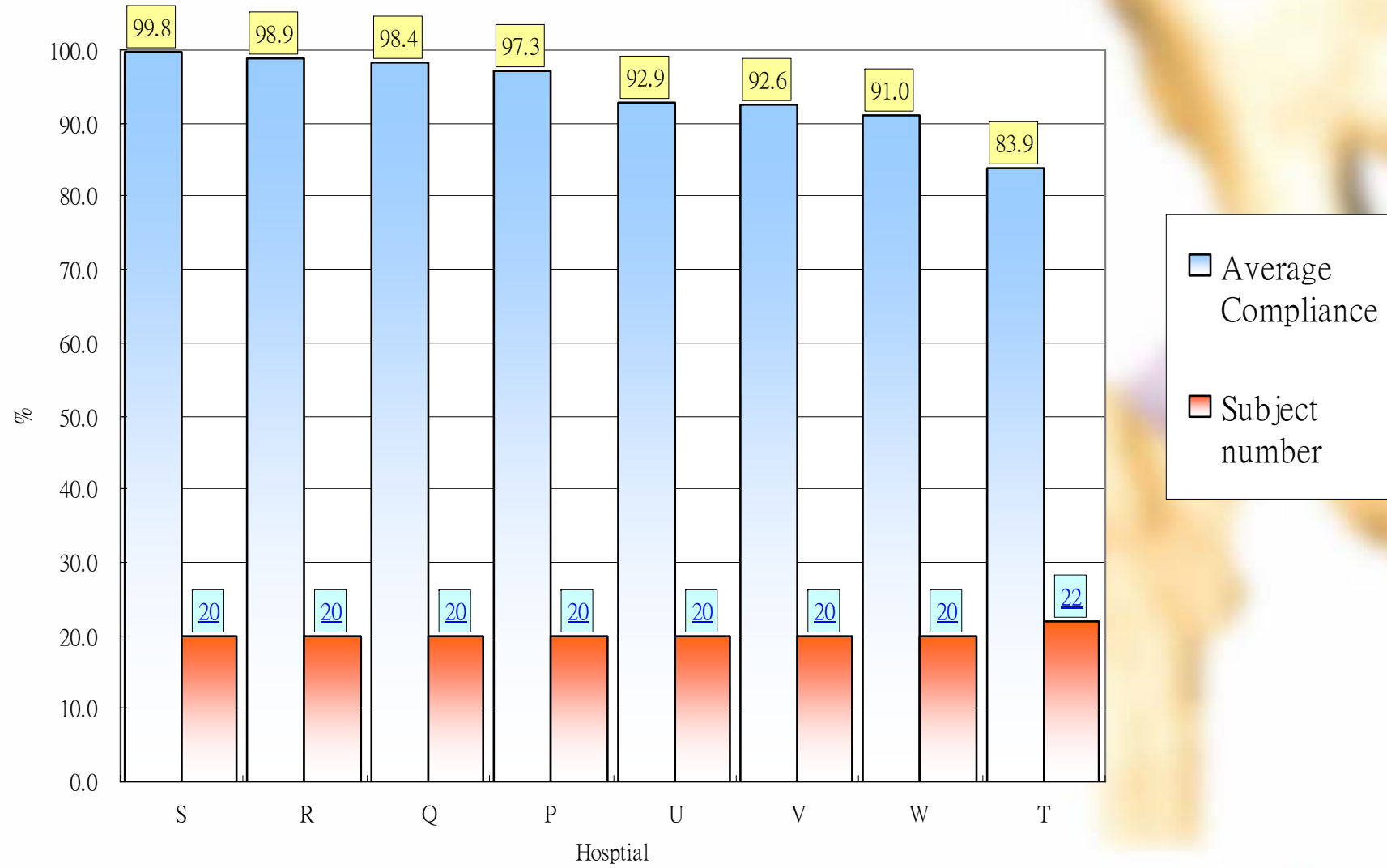
## Orthopaedic Intervention



# Audit Results – Extended Care

- 23 out of 26 items with compliance rate over 90%.
- Overall compliance rate of individual hospitals ranged from 83.9% to 99.8%.
- Average overall compliance was 94.3%.

## Extended Care Summary



# Reasons for Variances

- Procedures were done but not recorded in the progress notes.
- Documentations were too simple and not specific enough to reach the standard.
- Some documentations were missing during the filing procedure.
- Some colleagues missed the required items in the patient management process.

# Discussion

- The audit exercise was accomplished through concerted effort by all participating hospitals.
- The protocol had been well followed by our front-line colleagues within constraints in manpower.
- Satisfactory compliance in documentation standard in acute and extended care settings.

# Follow-up Actions

- Open forum to communicate with front-line staff on audit results and facilitate sharing of information on good practice.
- Communication with department heads on audit results of individual hospitals to identify areas for improvement.

# Way Forward

1. Second audit in September 2006 to complete the audit cycle and to review improvements made.

# Way Forward

2. A computer software programme developed to facilitate future audits in PT Departments.

## Clinical Audit of Physiotherapy Protocol for Geriatric Hip Fracture (Acute Phase)

-  1. **Audit Input Form (Single Form)**
-  2. **Audit Input Form (Table Form)**
-  3. **Summary of the Compliance**
-  4. **Statistics**
-  5. **Quit this Application**

For technical support please send email to:

[mfc094@ntwc.ha.org.hk](mailto:mfc094@ntwc.ha.org.hk)

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<a href="#">Acute Phase</a>		<a href="#">Back to Main</a>	<a href="#">Quit this application</a>	<a href="#">Output to Excel</a>								
		Date Audit	Therapist Involved	Patient HN	Auditor(s)	Hospital	1.1	1.2	1.3	1.4	1.5	1.6
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<a href="#">Delete</a>	<a href="#">Edit</a>	15/9/2005	3	HN050460163	2	TMH	No	No	Yes	Yes	Yes	Yes

# Way Forward

3. Moving from **Process Audit** to **Outcomes Audit** in the future.



***Thank You***

**Working Group on Physiotherapy Protocol for  
Geriatric Hip Fracture, PTCOC**