

# **Team Based Learning – A Way to Integrated Patient Centric Care**

Dr Quek Lit Sin  
Head, Senior Consultant  
Emergency Medicine Department  
Ng Teng Fong General Hospital Singapore





**Wu Guanzhong 吴冠中**; (August 29, 1919 – June 25, 2010)

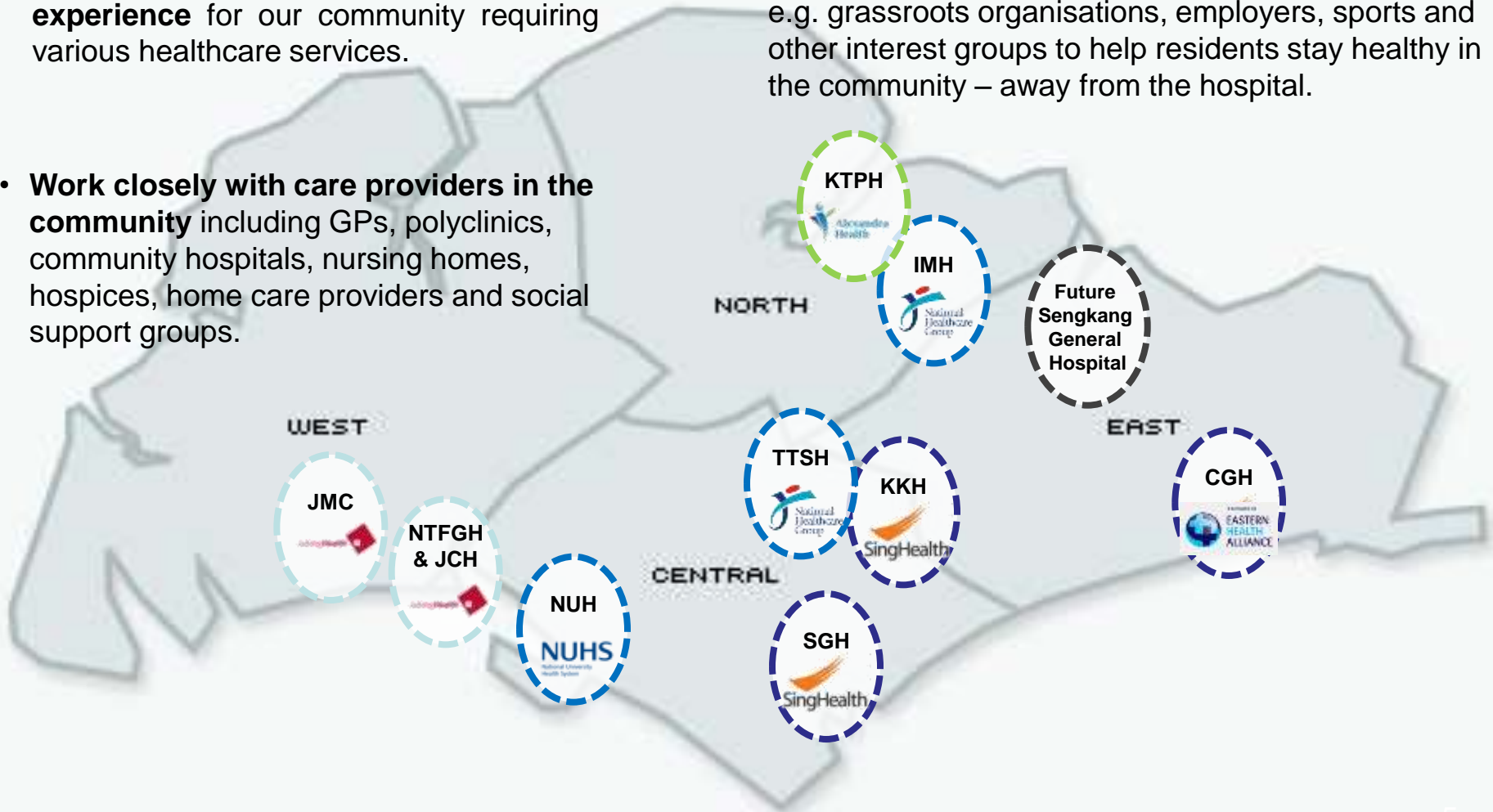
# About JurongHealth

- Managed **Alexandra Hospital** (AH) until 29 June 2015
- The 700-bed **Ng Teng Fong General Hospital** (NTFGH) will be the anchor regional hospital of JurongHealth. It is Singapore's first acute hospital to be twinned with the 400-bed **Jurong Community Hospital** (JCH) to provide integrated and hassle-free acute and rehabilitative care.
- Managing **Jurong Medical Centre** (JMC) to serve the community in the west.
- Partnering GPs in the west at the **Lakeside Family Medicine Clinic** (LFMC) to provide care for patients with chronic conditions.

# A regional healthcare cluster for the west

- **Provide integrated and seamless care experience** for our community requiring various healthcare services.
- **Work closely with care providers in the community** including GPs, polyclinics, community hospitals, nursing homes, hospices, home care providers and social support groups.

- **Engage non-healthcare community partners** e.g. grassroots organisations, employers, sports and other interest groups to help residents stay healthy in the community – away from the hospital.





## Jurong Community Hospital (JCH)

Total of 12 levels

400 beds (11% Private, 89% Subsidised)

- **Level 1**  
Admission & JCH Specialist Outpatient Clinics
- **Mezzanine Level**  
Clinical and Administration Space
- **Level 2 and 3**  
Private Wards
- **Level 4 to 12**  
Subsidised Wards

## Ng Teng Fong General Hospital (NTFGH)

Total of 16 levels

700 beds (25% Private, 75% Subsidised)

28 Intensive Care Unit beds and 42 High Dependency beds

15-bed Isolation Ward next to Accident & Emergency Department

18 Operating Theatres

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Diagnostics and Treatment
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Subsidised Wards

## Specialist Outpatient Clinics

Total of 8 levels

Training Centre

Auditorium

Diagnostic services

Pharmacy on every clinic floor

- **Level 1**  
Training facilities (including an auditorium) and Diagnostic Imaging services
- **Level 2**  
Pre-admission testing, Medical Social Services and retail
- **Level 3 to 7**  
Specialist Outpatient Clinics (120 consult rooms)
- **Level 8**  
Administration

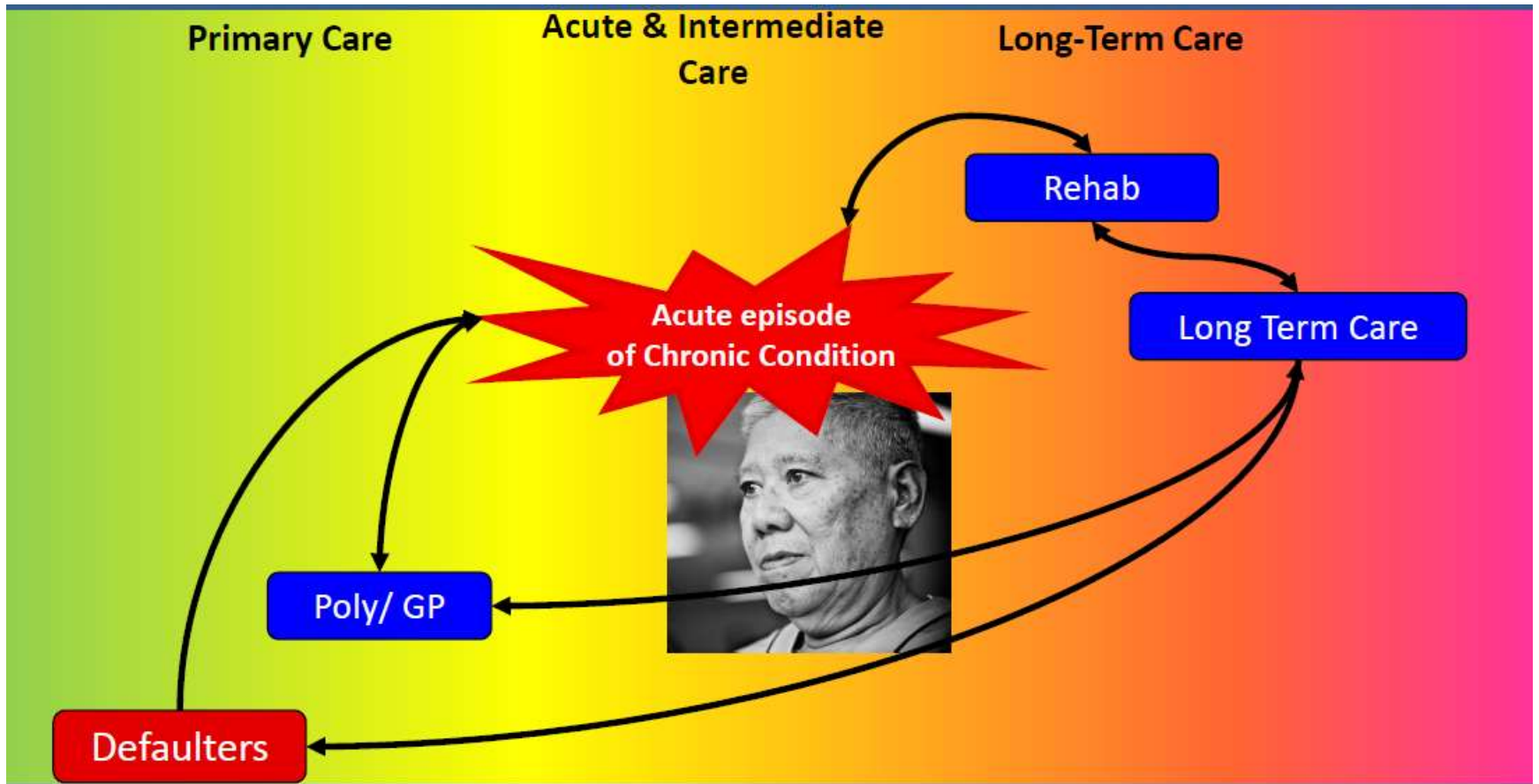








# The Current



**ACUTE CARE**

**INTERMEDIATE CARE**

**LONG-TERM CARE**

Aged Care Assessment Services to triage vulnerable patients and develop discharge plan

Right-site rehab and subacute care in Community Hospitals



Day rehab & care services

Up-skilling Nursing Homes

Community nursing services

Caregiver training

Fall prevention

Comprehensive Care Needs Assessment

Transitional Post-Acute Home Care to reduce stay in RH and enable early discharge to home

Information and Referral

**Home**



Integrated Screening and Prevention Programme

Integrated Clinical Pathways  
National Electronic Health Record

Primary Care Networks and Disease Management Units

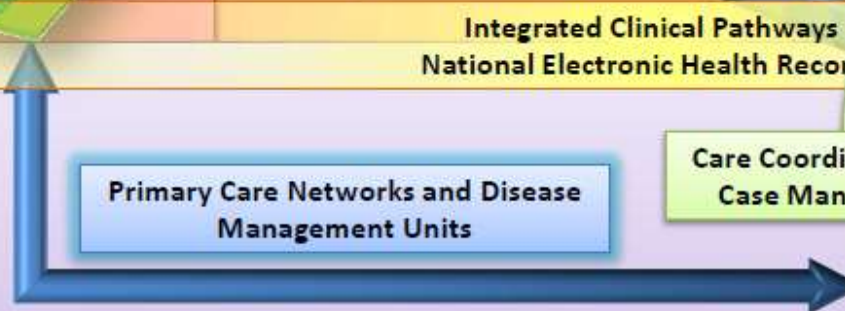
Care Coordination and Case Management

Tiered Primary Care

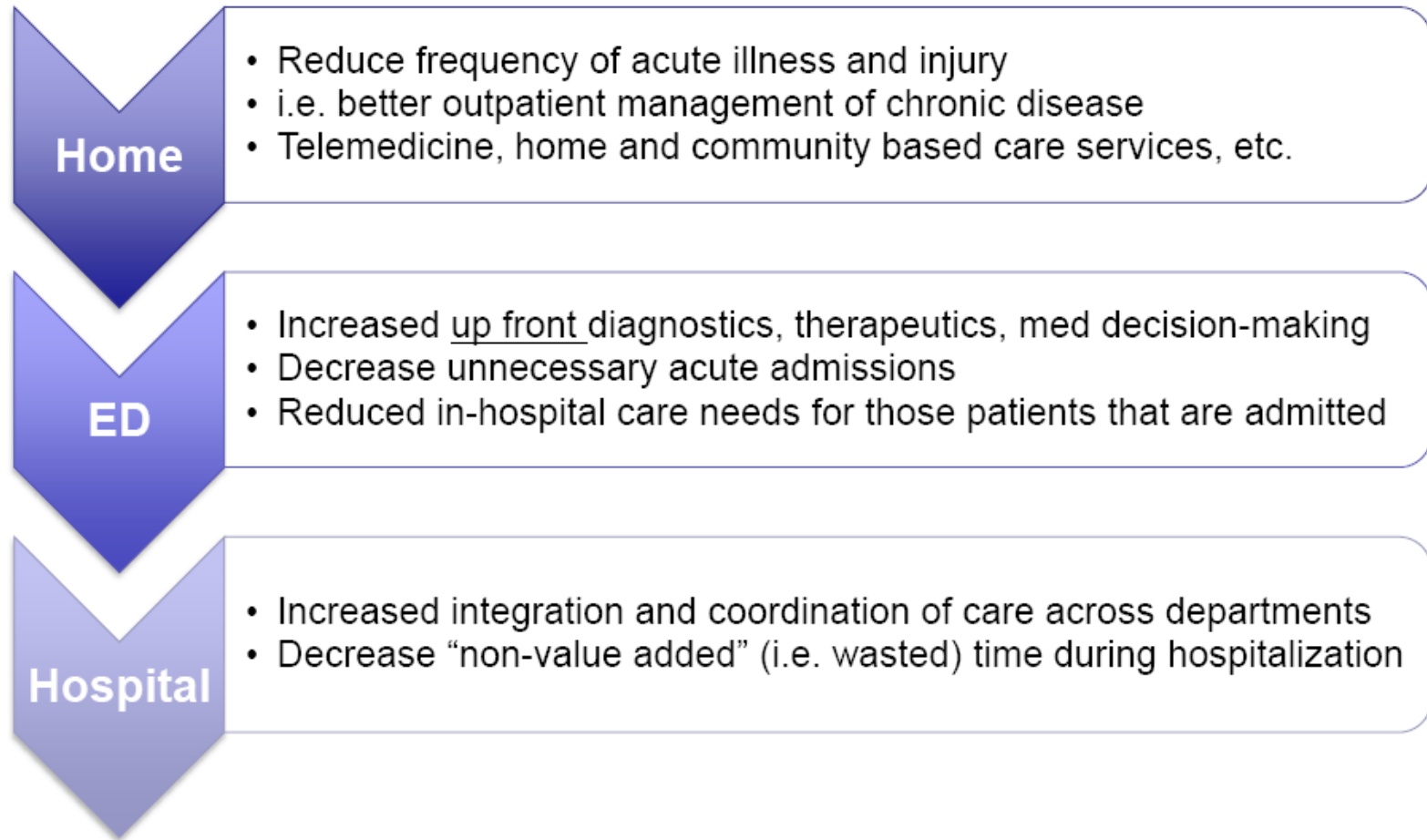
Community Allied Health Support

**PRIMARY CARE**

*Adapted From MOH*



# Strategies for Reducing Demand for Inpatient Hospital Care





# Singapore

## 'Silver Tsunami'

By the year **2030**, 1 in 5  
Singaporeans, or **900,000**, will  
be 65 years of age, or over

# Models of Care

# **SAFE Program**

**S**UBACUTE

**A**MBULATORY CARE FOR THE

**F**UNCTIONALLY CHALLENGED AND

**E**LDERLY

# PROGRAM DESCRIPTION

- Home visits made by a [multidisciplinary team](#) with doctors, nurses and medical social workers, therapists, dieticians and pharmacist.
- [Opportunistic screening](#) and prevention
- Patients will be observed in the program over a [3 month period](#) with an [estimated 4 visits](#) from the multidisciplinary team; estimated of 1 doctor visit, 2 nurse visits and 1 allied health visit as determined by the clinician depending on patient's condition.
- Final goal is to discharge the patient to a community partner.



# Inclusion Criteria - Diagnosis

## 1. Falls/Trauma cases with minor injuries

- ✓ Minor Head injury
- ✓ Minor Contusions
- ✓ Compression spine fracture
- ✓ Stable limb fractures
- ✓ Haemodynamically Stable
- ✓ Conservative treatment
- ✓ Pain control and Rehabilitation at home

# Medical Cases

**2. Infections** (Chest infection, UTI, Cellulitis)

**3. Exacerbation of chronic medical conditions** (COPD/Asthma/CCF/DM/Hypt) – for optimization

**4. Dementia** with behavioural and psychological symptoms – for symptom control and caregiver support

**5. Frequent ED Re-attenders** (with possible social or care issues)

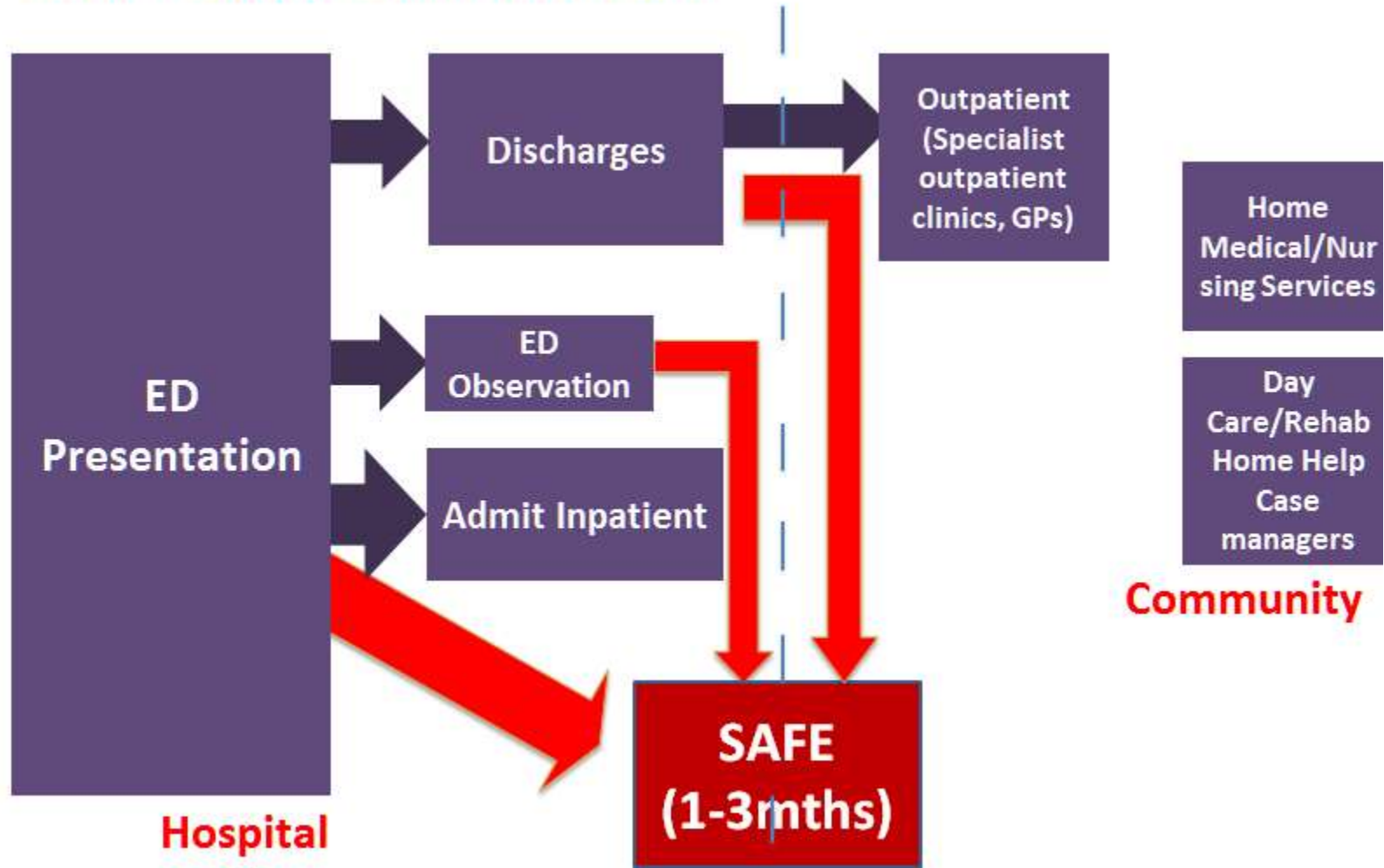
**6. Functional decline** (sub-acute)

# Exclusion Criteria

- Haemodynamically unstable
- Unstable mental status (active psychosis)
- No clear diagnosis
- Intensive monitoring (e.g. 4hourly or more)
- Urgent surgical or radiological interventions
- Addiction to alcohol, drugs, gambling, etc.
- Vagrants and homeless

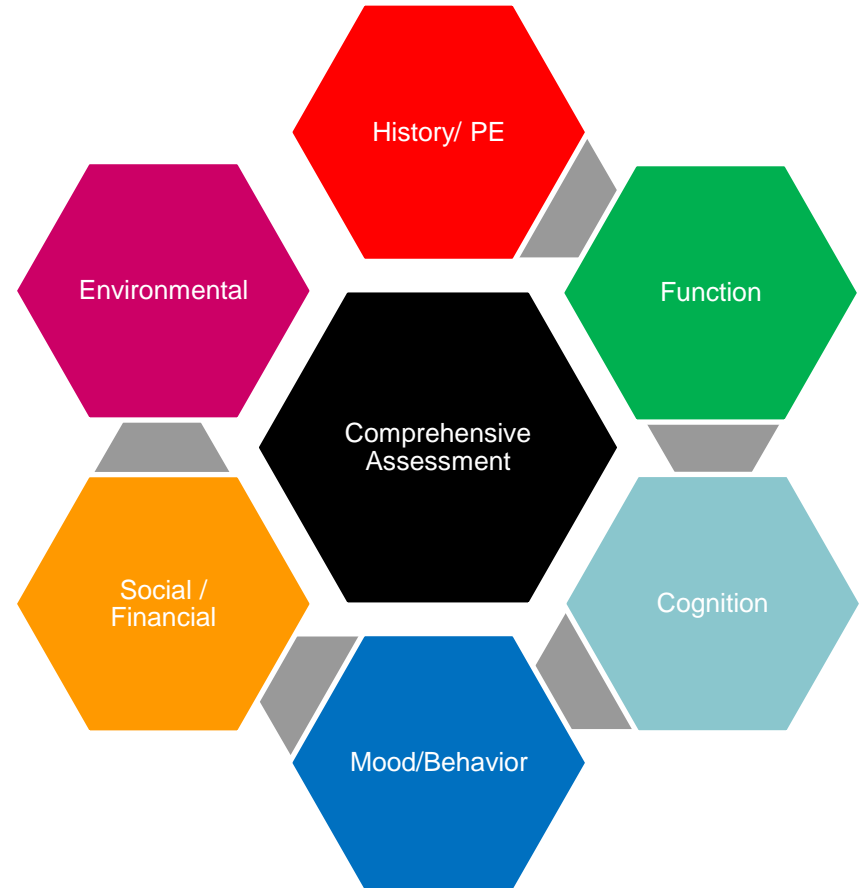


# ENTRY POINTS FOR SAFE PATIENTS



# Core Components of SAFE

- ✓ Comprehensive Geriatric Assessment in the Home



## Multiple chronic diseases

DM, Hypertension, Hyperlipidemia,  
Peripheral vascular Disease, IHD,  
CVA, COPD

## Cognitive impairment

Dementia with BPSD,  
Depression

## Social issues

Caregiver burden  
Environment safety  
Elder Abuse

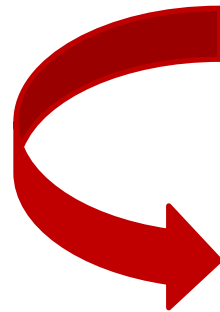


## Limited mobility

Wheelchair or bed bound  
Transportation issue  
Dependent on caregiver

## Financial issues

Limited  
resources  
Cost sensitive



# CARE PLANS FOR ELDERLY

# Core Components of SAFE

- ✓ Comprehensive Geriatric Assessment in the Home
- ✓ Multi-disciplinary Team



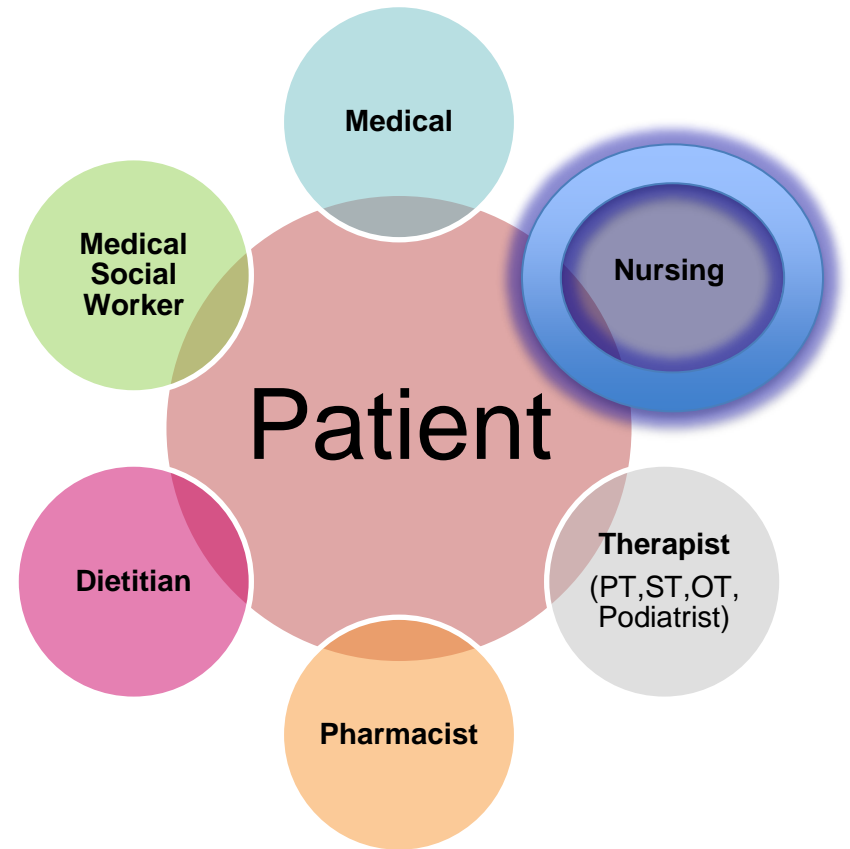
# SAFE Multidisciplinary Team





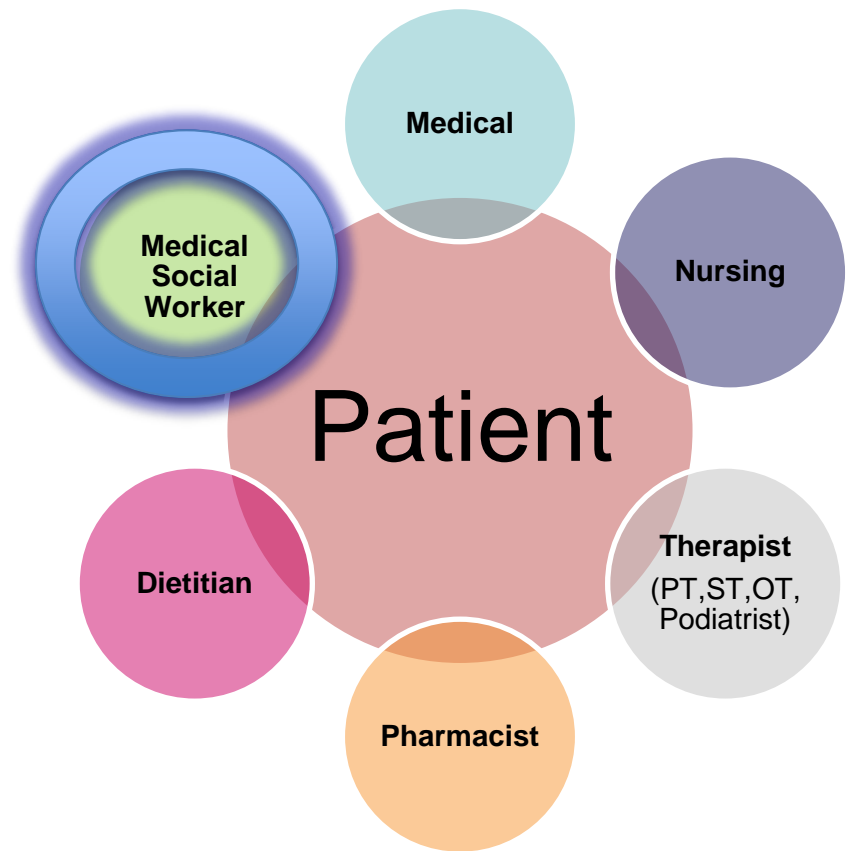
# Core Components of SAFE

- ✓ Comprehensive Geriatric Assessment in the Home
- ✓ Multi-disciplinary Team
- ✓ Weekly telephone follow-up



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- ✓ Comprehensive Geriatric Assessment in the Home
- ✓ Multi-disciplinary Team
- ✓ Weekly telephone follow-up
- ✓ Direct liaison and referral to community services



# Integration with Community Partners

- Home Medical/Nursing
- Home Therapy
- Home Help
- Meal delivery/ Laundry/  
Housekeeping
- Personal Hygiene/ Escort/  
Transport
- Day Rehab/Care services
- Dementia Day Care
- Community Case Managers
- Palliative and Hospice Home  
Care



Tzu Chi

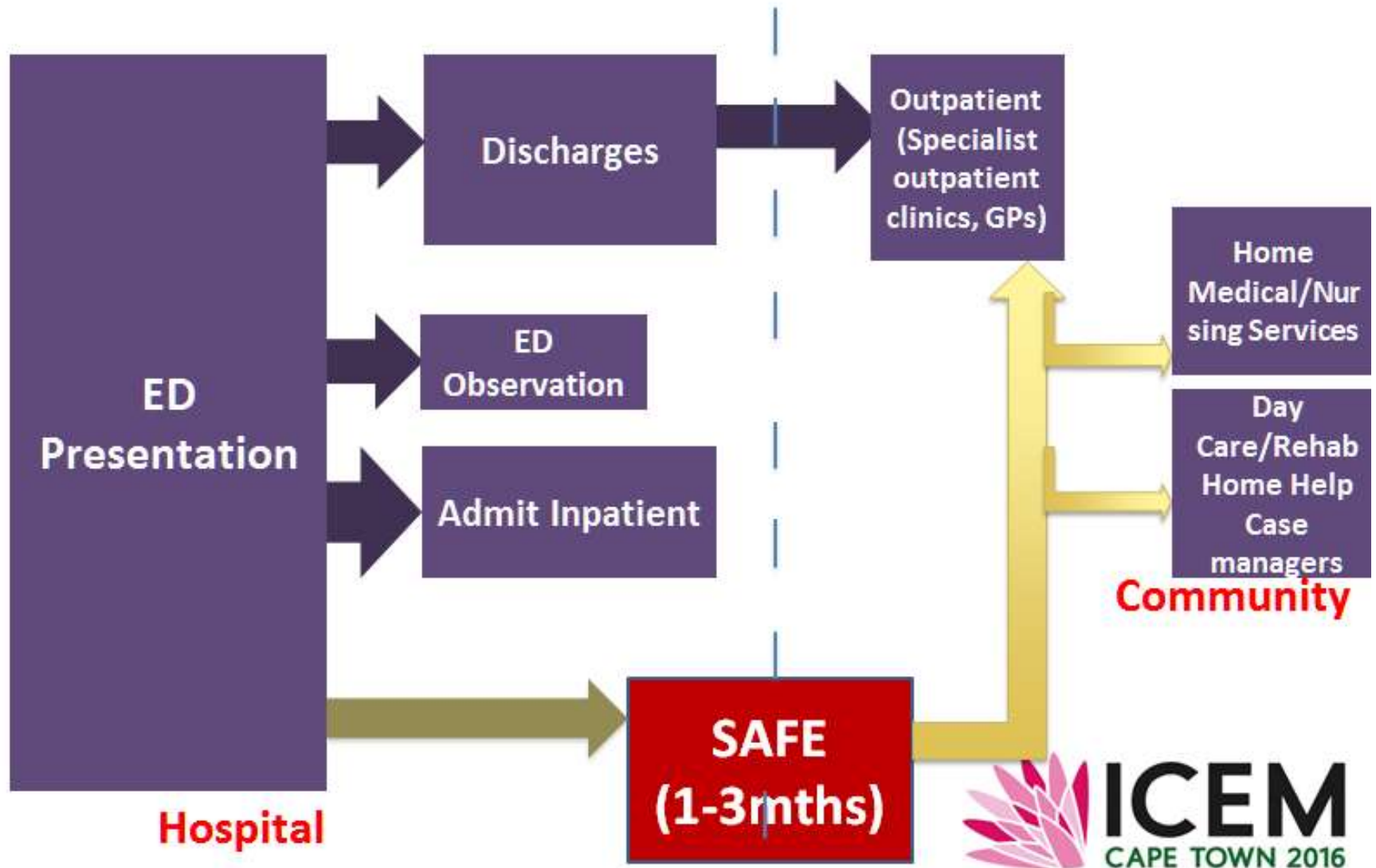


# Core Components of SAFE

- ✓ Comprehensive Geriatric Assessment in the Home
- ✓ Multi-disciplinary Team
- ✓ Weekly telephone follow-up
- ✓ Direct liaison and referral to community services
- ✓ Personalized Discharge Plan



## EXIT POINTS FOR SAFE PATIENTS



# Benefits

- At an Individual Level
  1. Improved home safety
  2. Decreased fall risk
  3. Improved medical compliance
  4. Improved balance and gait
  5. Improved psychosocial conditions
  6. Care-giver satisfaction
- At Hospital/National Level
  1. Reduced ED re-attendances
  2. Reduced hospital admissions
  3. Positive impact on future of elder care

# Applying TBL to Patient Care Sessions

What is TBL?

- **Team Based Learning** is a small learning group method where individual work is done outside the class and team work is completed in class.

What makes TBL?

- **The four principles of TBL** are:
  - properly formed and managed groups,
  - individual accountability,
  - team assignments that promote learning, group interaction and team development, and
  - frequent and immediate feedback to individuals.

Why use TBL?

- **The rationale for using TBL** is that it is a good interactive alternative to passive lectures, requires no extra facilities or faculty, develops interpersonal skills and assists “at risk” individuals.

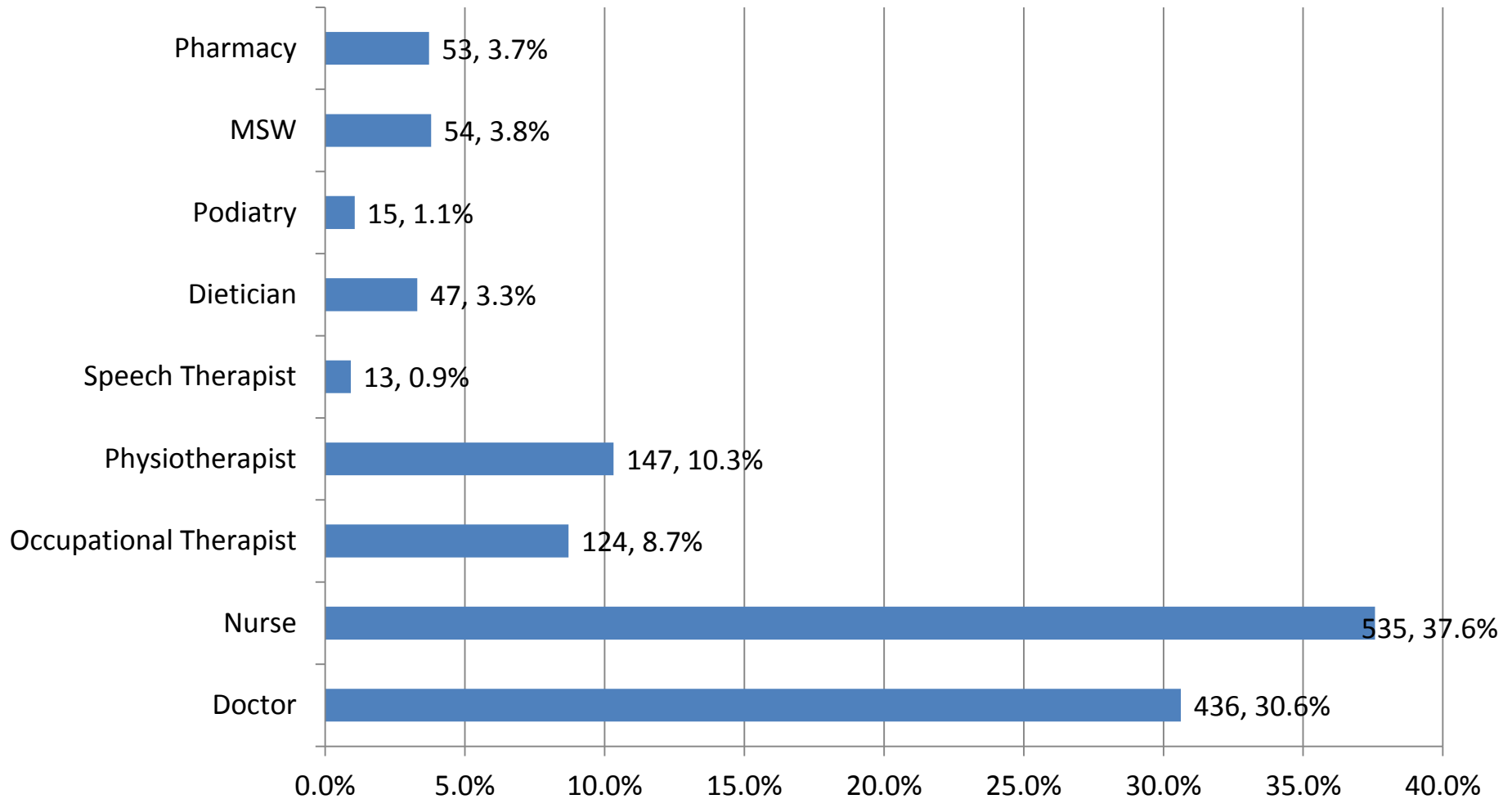
How to do TBL?

- **Implementation of TBL** involves planning before the session, forming groups in the 1<sup>st</sup> class and reminding the individuals of the learning objectives, content application and team work near the end of the session.



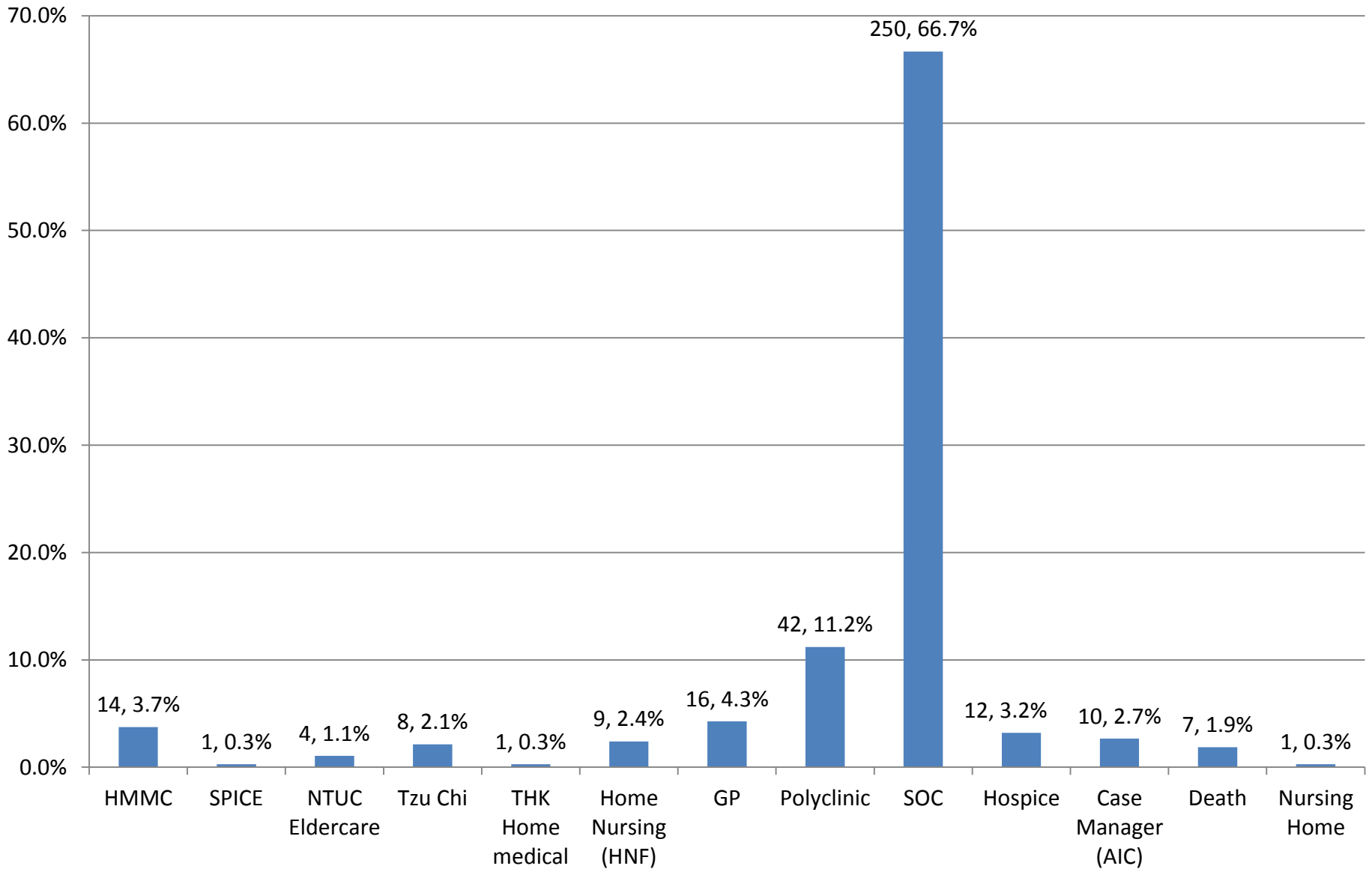


# SAFE Multidisciplinary team (Jan 13 till Dec 14)

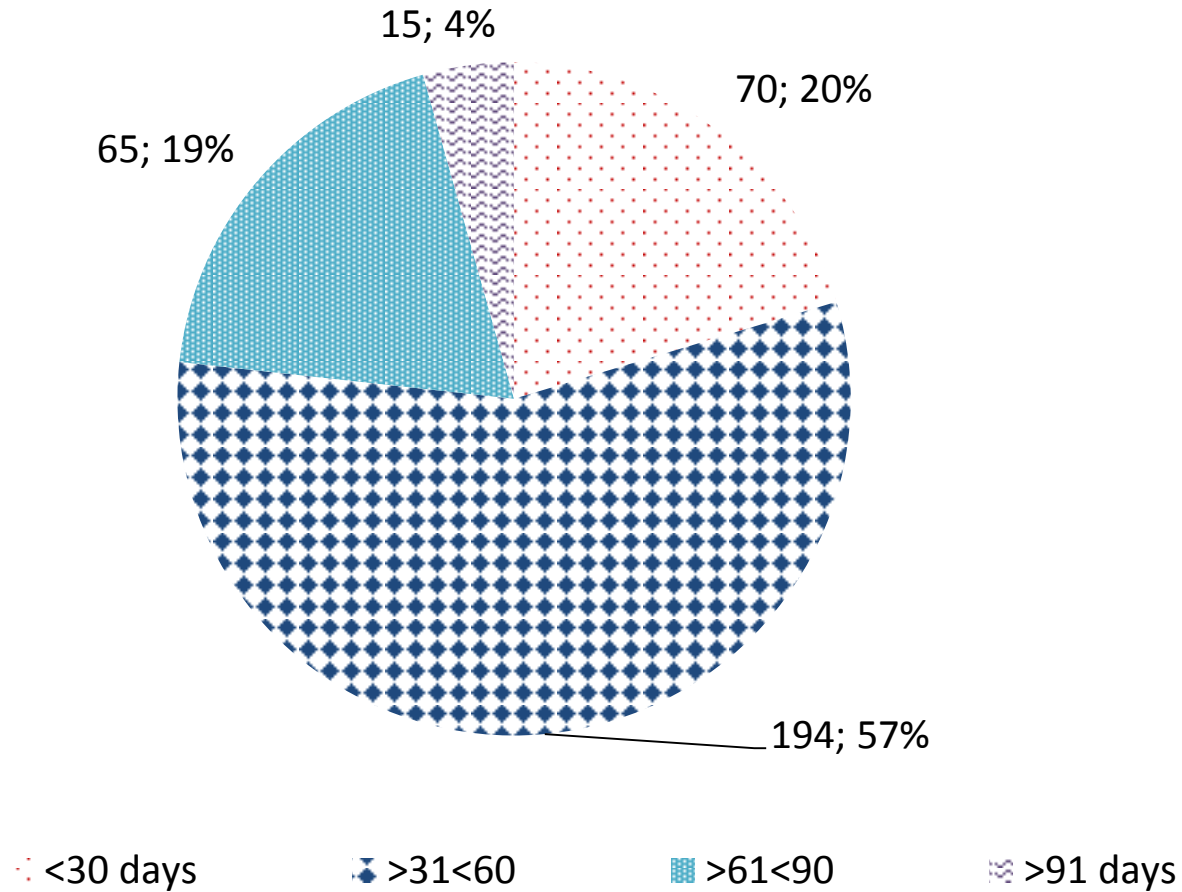


**Average number of visits per patient : 4**

# Types of Referrals SAFE discharged patients to (Jan 13 till Dec 14)



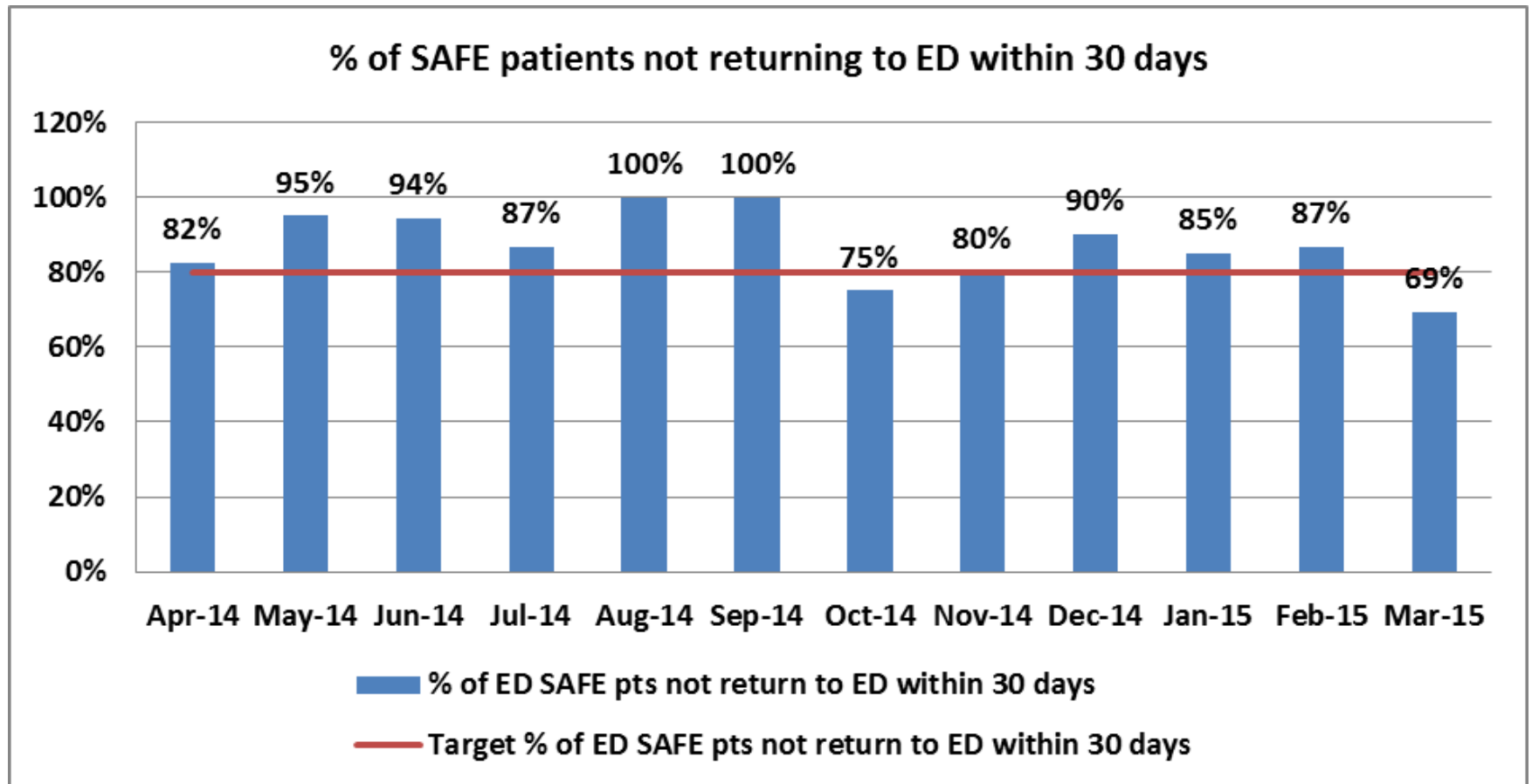
# Duration of SAFE patients in SAFE program (Jan 13 – Dec 14)



**Median is 41 days**

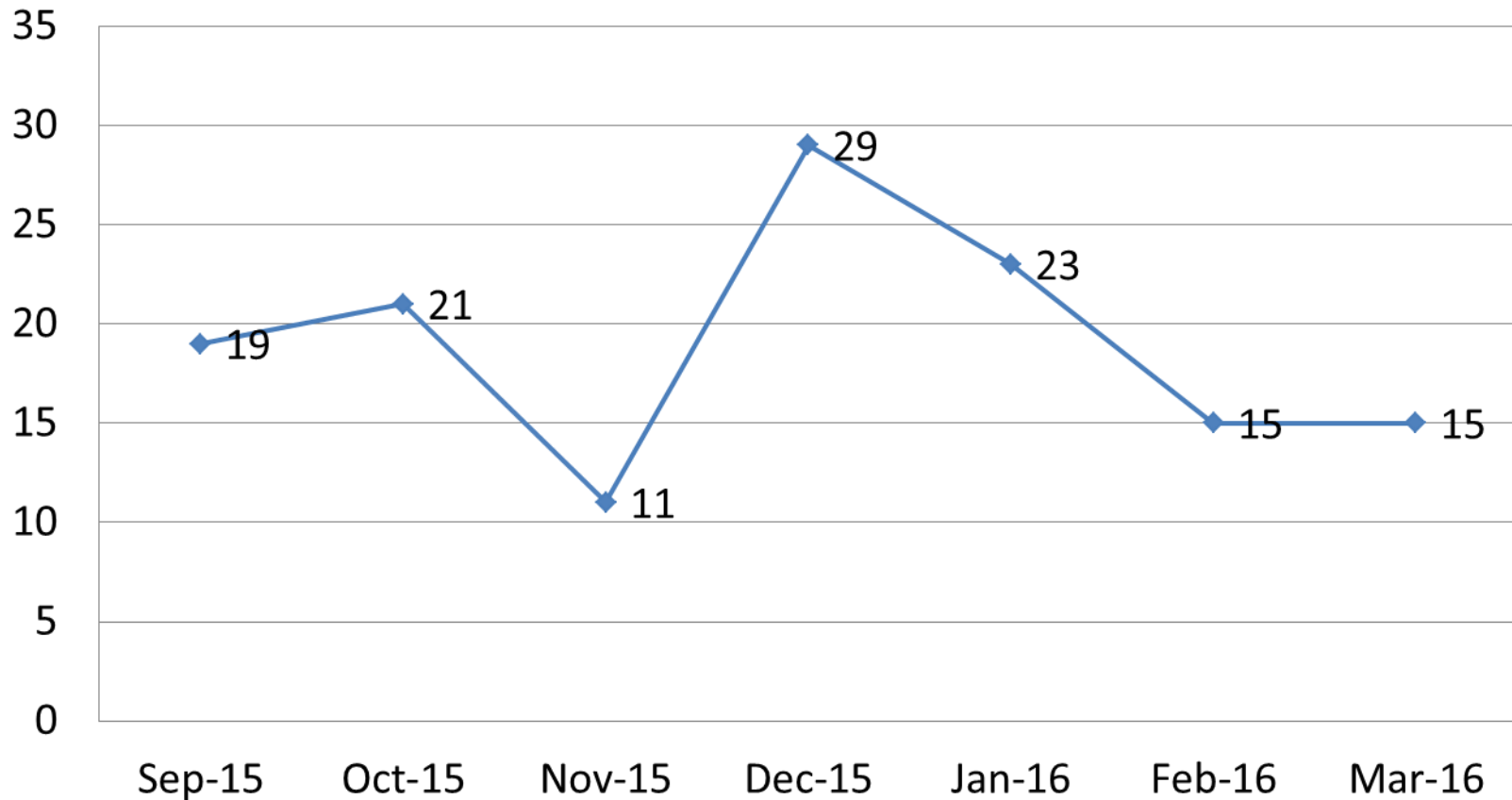
# SAFE KPI - % of patients not returning to ED at 30 days

86.76% of SAFE patients did not return to ED within 30 days in Apr 2014 – Mar 2015



# SAFE KPI – No. of patients recruited (NTFGH)

## Number of ED recruitment to SAFE



**GIFT Program**

**GP**

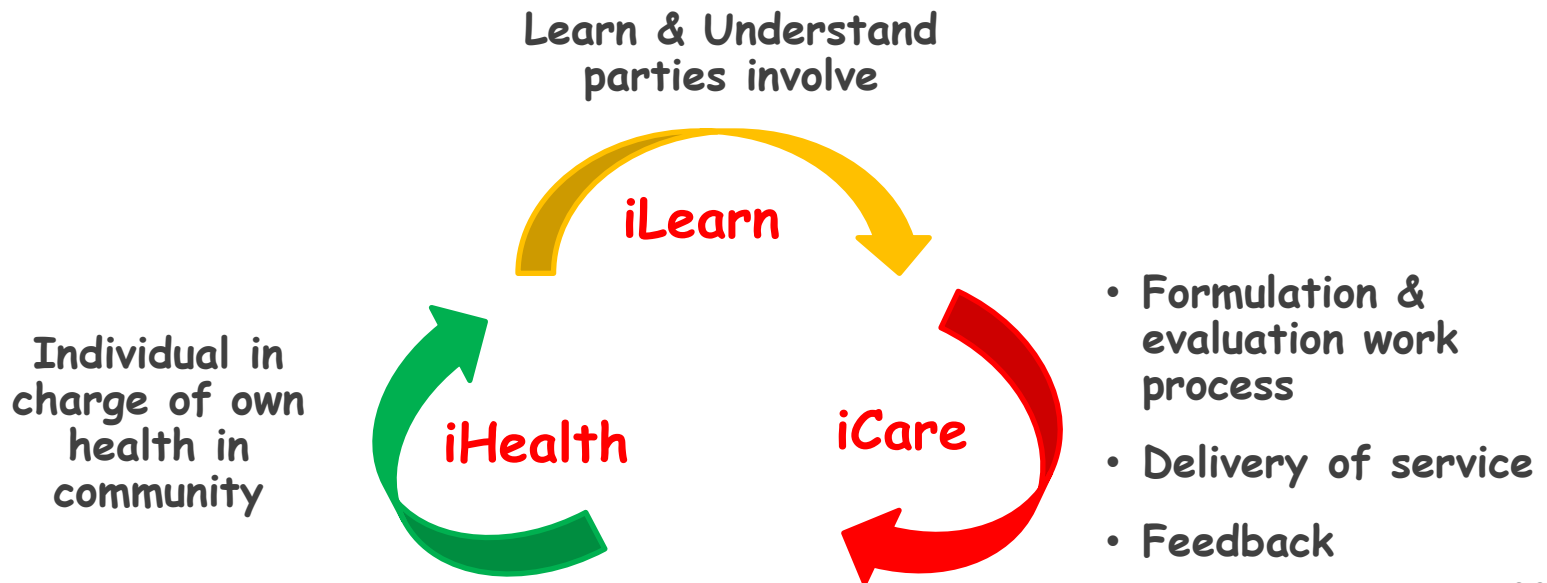
**I**NTEGRATED

**F**FAMILY CARE

**T**TEAM

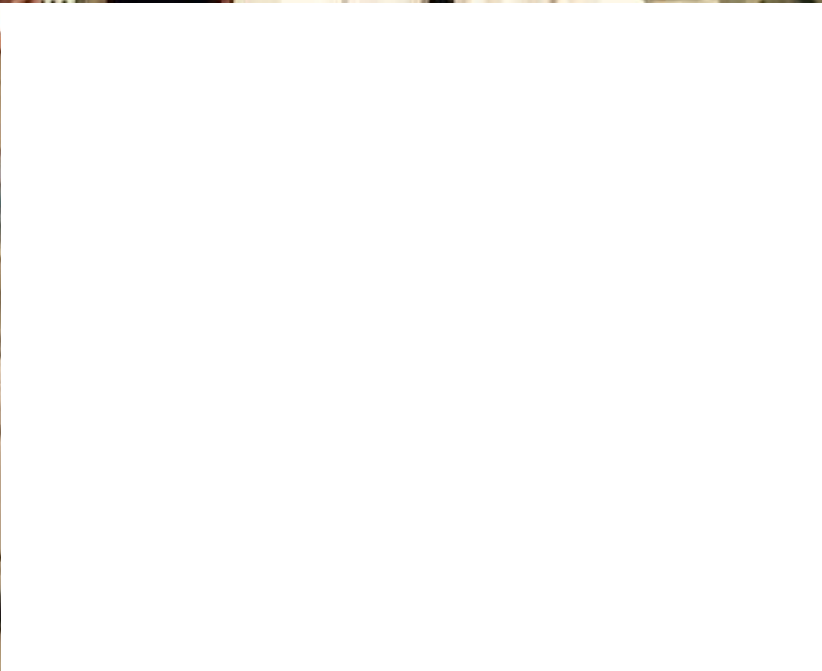
# Referral to Community

- Initiative with GP partners and Community Operations:- General Practitioner Integrated Family care Team (GIFT) program; aims to augment ED - GP collaboration framework to provide a seamless continuation of care for patient at community level after visit from ED.









# Acute Hospital and Community Hospital Collaboration

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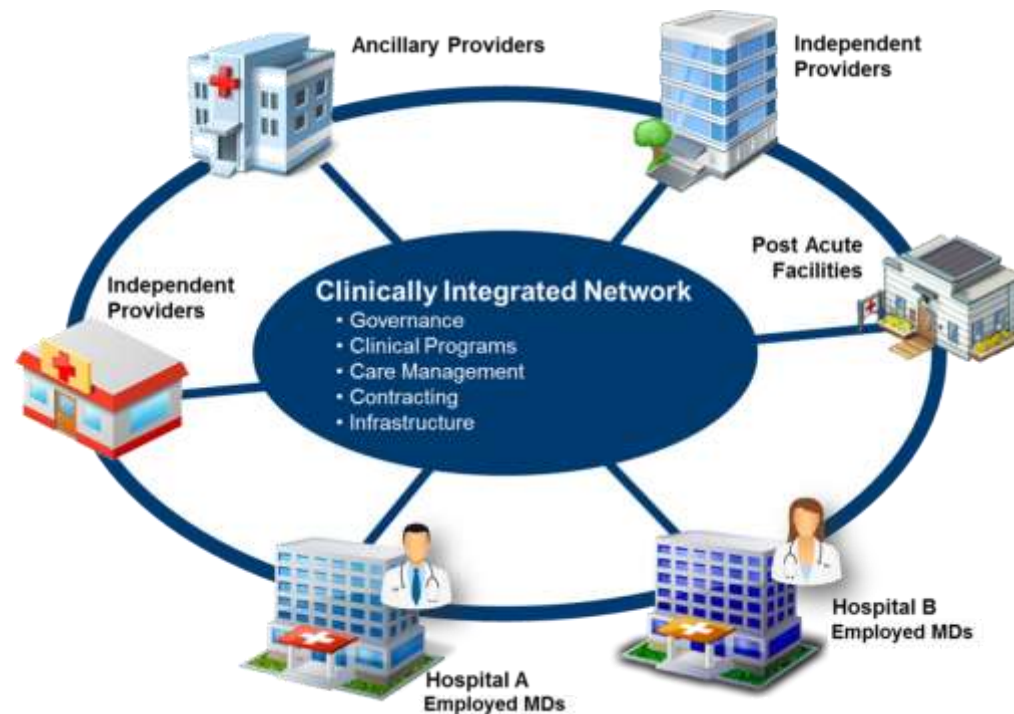
## Monthly Transfers to Jurong Community Hospital

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
NTFGH	21	18	28	61	95	80	101	111	128	124
NUH		18	15	13	13	11	22	15	19	18
SGH		2	8	10	15	15	16	9	9	11
TTSH		2	56	4	5	4	5	1	3	2
KTPH		1	0	9	4	6	1	0	3	0
CGH		0	0	0	0	0	1	1	0	1
Private		0	0	1	1	2	0	0	0	2

**THE FUTURE**

# Clinically Integrated Network

- CINs are a group of physician and physician groups across multiple specialties using proven protocols and best practices to improve patient care. They encourage collaboration between members to meet quality benchmarks that improve outcomes and demonstrate value to the market..





**Thank You**

[lit\\_sin\\_quek@juronghealth.com.sg](mailto:lit_sin_quek@juronghealth.com.sg)