Health
Northern Sydney
Local Health District

GRACE

Geriatric Rapid Acute Care Evaluation

Bridging the gap between Acute and Residential Aged Care

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Brief History

- HKH is a major metropolitan hospital within Northern Sydney Local health District
- Respected provider of care since 1933
- HKH has approx. over 9,000 admissions per year
- 31,000 ED presentations
- 275,000 non-in patient occasions of service
- 1300 staff members care for our 265,000 people living in Hornsby Kuring-gai area

Hornsby Kuring-gai Residential Aged Care Facilities

- 34 Nursing Homes with Approx. 2150 residents
- 6 aging in-place facilities with approx. 600 residents requiring high level of care
- 19 Hostels approx. 3000 residents requiring either high/low level of care
- 5 Dementia Specific hostels with approx. 600 residents

Major challenges 2004-05

- High levels restricted access and access block (65-70% in 2004/2005)
- High number of patients waiting NH placement
- Length of stay (especially medical casemix)
- High volume of elderly complex patients presenting to ED and requiring admission

Baseline Activity Data Hornsby Kuring-gai Health

	2003/2004	2005/2006	2007/2008	2009/2010
ED Presentations	22,205	22,756	23,854	31,101
Admissions via ED	10,363	9,622	12,256	9,000
Bed days in ED	7,096	6,796	6,077	4,302
Bed days in EMU	2,498	2,725	2,514	2,090

Background 1

- GRACE commenced at HKH in August 2005
- The pilot was funded through state sustainable access funding to reduce access block
- Division of General Practice survey in HKH demonstrated a need for more appropriate and responsive model of care for residents from NHs

Background 2

- Literature review indicated older people may benefit from more flexible models of care by receiving treatment in their own environment rather than in hospital
- Care managers of nursing homes expressed concern over level of care of residents received when admitted to acute hospital
- Nursing home patients occupied 536 bed days per month in November 2005

GRACE Evaluation (2004-05)

- 712 patients from NH
- Average Length of Stay (ALOS) 8 days
- 1176 pts from other Residential Aged Care facilities (RACF)
- ALOS 9 days
- Approx. 11,000 bed days per year
- 10% of acute admissions
- 20% of acute hospital bed days

GRACE Anatomy

- 1 FTE CNC
- 0.8 FTE RN
- 0.63 FTE CNS
- 0.4 FTE Medical
- After hours nurses available from 1330-2200 hrs who completed GRACE/ASET aged care preceptorship program
- Saturday RN's from 0700-2200hrs
- Sunday RN from 0800-2200hrs

GRACE CNC

- CNC is located in the ED, involved in Phone Triage, Health Assessment, Care Planning, Collaboration, Networking, Advocacy, hospital avoidance, Education, Mentoring, Quick Turn Around (QTA) and Fast-Tracking
- CNC works closely with ED and EMU/MAU (48 hour ward) nursing and medical staff
- Four allocated beds in EMU for GRACE patients
- Promoting Advance Care Planning

GRACE Model

- Collaborative network approach
- Established care pathways
- Care co-ordination/care planning
- Enhanced discharge planning
- Integrated systems transition of care
- Self management support
- Appropriate monitoring and follow-ups

AIMS 1

- To establish a single point of access to increase patient flow in the ED by prioritising NH patients
- Patient centred care
- Create a tension for change to improve patient journey by fast tracking patients medical assessment and treatment in the ED
- Build up capacity in NHs to enable residents to be treated at their facility, by supporting staff
- Provide decision support, education, in-services, collaboration and networking

AIMS ll

- Avoid un necessary hospital presentation
- Reduce access block
- Information sharing prior to admission to contribute to care plan
- Booked presentations to facilitate fast track to radiology
- Raised awareness of ACD within ED,EMU, MAU, NHs and GPs

AIMS 111

- Increase communication between NHs, ED and EMU/MAU
- Establishment of focus group
- GRACE forum, networking
- Information sharing
- Fast track to radiology
- NHHEDI

GRACE Target 1

- Presentations to Hospital down by 20%
- LOS Emergency admitted patients
  - Nursing Homes from 6 days to 2 days
  - Hostels from 7.5 to 6.5 days
- Access Block below 20%
- Advanced care planning – 20%
- Escalation plans facilities – 80%

GRACE Target ll

- Improved satisfaction GPs & Residential Aged Care staff
- GP assessment before transfer to hospital
- Palliative care management at facility
- Psych. Review at the facilities

Benefits for patients 1

- CNC advocate for patient/families preferred treatment options in ED/EMU/MAU
- NH patients no longer "Last in Line" for comprehensive aged care assessment
- 95% of NH patients in the 75 to 104 aged group "fast tracked" through the ED in less than 6 hours

Benefits for patients ll

- 36% of patients are admitted to the EMU ward, with 87% spending less than 48 hours in EMU
- 52% of patients returned back to the NH from the ED
- The capacity of NH staff enhanced to facilitate patients being cared for in their own bed avoiding an ambulance trip to hospital. eg Gastro outbreak, tube changing, S/C fluids for hydration, palliation and wound care

Fast Track to Radiology

- A plan to reduce waiting time in the ED
- NH patients presenting with limb injury following a witnessed fall
- SB GP at the NH
- Requiring xray to rule out fracture

Rationale for new process 1

- Category 4s and 5s given at Triage in ED
- Extended waiting time
  - on ambulance trolley
  - to off-load to ED bed
  - to be seen by ED MO
  - for wards-person to xray

Rationale for a new process ll

- Increased agitation and confusion in ED and xray department
- Increased Length of Stay (LOS)
- Regular nursing observations
- Access block
- Preventing avoidable admission to the ED

Expected outcome

- Co-ordinated and systematic approach to fast tracking NH patients
- To reduce waiting time
- To improve patient flow
- To reduce LOS
- To reduce confusion and disorientation

Method

- Data collection indicated that HKH has a high number of admissions from NHs and Hostel 2007
- The GRACE CNC reviewed the number of NH presentations (66 patients) for falls and limb injuries (Dec 2007)
- Statistics showed ALOS for NH patients requiring a simple limb xray following a witnessed fall was 5.6 hours per patient from January 2007 to January 2008

Method cont….

- In December 2007 the process was reviewed
- In January 2008 the new fast track process was developed and piloted for 4 weeks
- In February 2008 the process was evaluated and discussed by a panel of key stakeholders
- Endorsed in April 2008 for implementation

N. H. H. E. D. I.

Nursing Home & Hostel Emergency Decision Index

ACUTE ASSESSMENT

KEEP CALM – it helps Resident

A – **AIRWAY** – Obstructed? Noisy?

B – **BREATHING** – Difficult? None?

C – **CIRCULATION** – No pulse,
Bleeding – slow or fast? Skin colour?

D – **DANGER** – Remove the resident or yourself from danger

- Note time of new symptom onset
- What is the resident doing/not doing that would be normal for them?
- Consistency of symptoms - day/night – is it the same?
- New or missed medications?

INFORM RELATIVES or PERSON RESPONSIBLE

To purchase this manual please contact Hornsby Ku-ring-gai Hospital, Division of Rehabilitation and Aged Care Services.
Contact phone number 9477 9338

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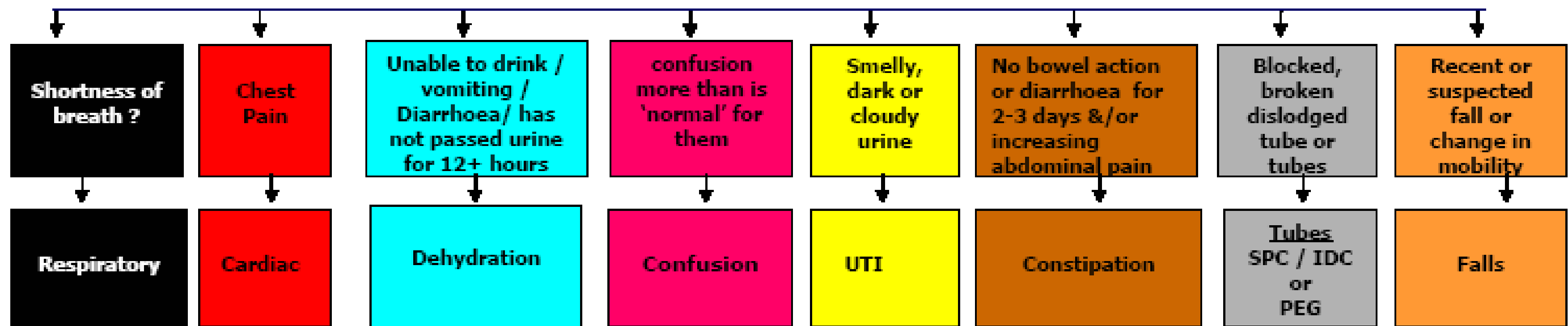
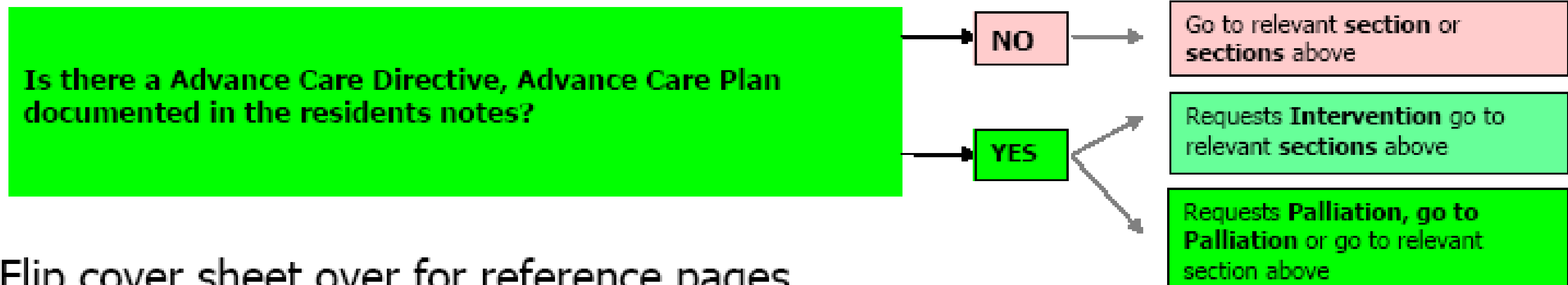
N. H. H. E. D. I.

Nursing Home & Hostel Emergency Decision Index

Has your resident one or a combination of the following ?





Flip cover sheet over for reference pages.

This chart is a guide, and needs to be supported by clinical judgement.

ACT NOW

If the resident is increasingly breathless AND if one or more of the following is present:

- Bluish coloured lips or finger nails
- Chest pain **see chest pain section**
- A respiratory rate which has fallen to 8 breaths per minutes or risen above 25 breaths per minute
- Can't say more than single words or phrases due to breathlessness
- A heart rate of more than 110 beats per minute
- Their blood pressure has fallen below 90 mmHg systolic (top reading)

1. Notify GP
2. Call GRACE as needed
3. If required call Ambulance
4. Contact family

ACT Within 24 hours

If the resident has any of these symptoms present:

- Has increasing breathlessness
- Has increasing confusion and cough – dry or moist
- Unexplained fever for couple of days
- Has decreased intake of food or fluid due to breathlessness
- Can't do their normal level of activity due to breathlessness

1. Notify GP
2. Call GRACE as needed
3. May ask the family to sit with resident

While waiting for help

Do the following:

1. Give Oxygen at 2 litres per minute via nasal prongs or if using mask give Oxygen 6 litres per minute, **including** residents with Chronic Airways Limitation.
2. Give residents regular and/or prn respiratory medication as prescribed to relieve increasing respiratory difficulty ie. Puffer/nebuliser
3. Monitor effectiveness of Oxygen/medications - review

TIPS:

- Sit resident upright – place arms on a pillow, on top of bedside table
- Document respiratory rate, heart rate, blood pressure for GP/Ambulance, repeat as required

Respiratory

ACT NOW

Does the patient have an Advance Care Plan or Directive? What level of care is the resident/family requesting? This will assist decisions about treatment. Refer to the **Palliative Care Information Guide** developed by the **HKH Division of General Practice.**

If the resident has any of the following symptoms:

- •Expressed pain or pain suggested by facial grimace, knees pulled toward stomach or jaws clenched
- • resident may also be agitated, anxious and restless
- •Increasing agitation, confusion or hallucinations esp. involving creepy things
- •Mouth/tongue which is dry, painful, red and/or white coating
- •Signs of developing pressure areas eg. On back, heels or pressure on the ears caused by oxygen tubing etc.
- •Diarrhoea or constipation affecting comfort

- •Consider family/friends or religious or spiritual support
- •Keep the family/person responsible informed about any decline in the residents condition

1. Check Care Plan for directions
2. No directions? Contact GP
3. Call GRACE as needed
4. Invite family/friends to sit beside the resident

ACT Within 24 hours

Use the **Palliative Care information Guide** for early identification of new symptoms and timely assistance from the GP & Palliative Outreach Team.

1. Notify GP
2. Call GRACE as needed
3. Invite family to be involved at the bedside needed

While waiting for help

1. Reassure the resident family is coming/help is on the way- even if person appears unconscious they can often hear and understand what you are saying
2. Check the records – Are there special religious rituals that need to be completed before or soon after death such as in Jewish, Islamic and Buddhist religions?

TIPS:

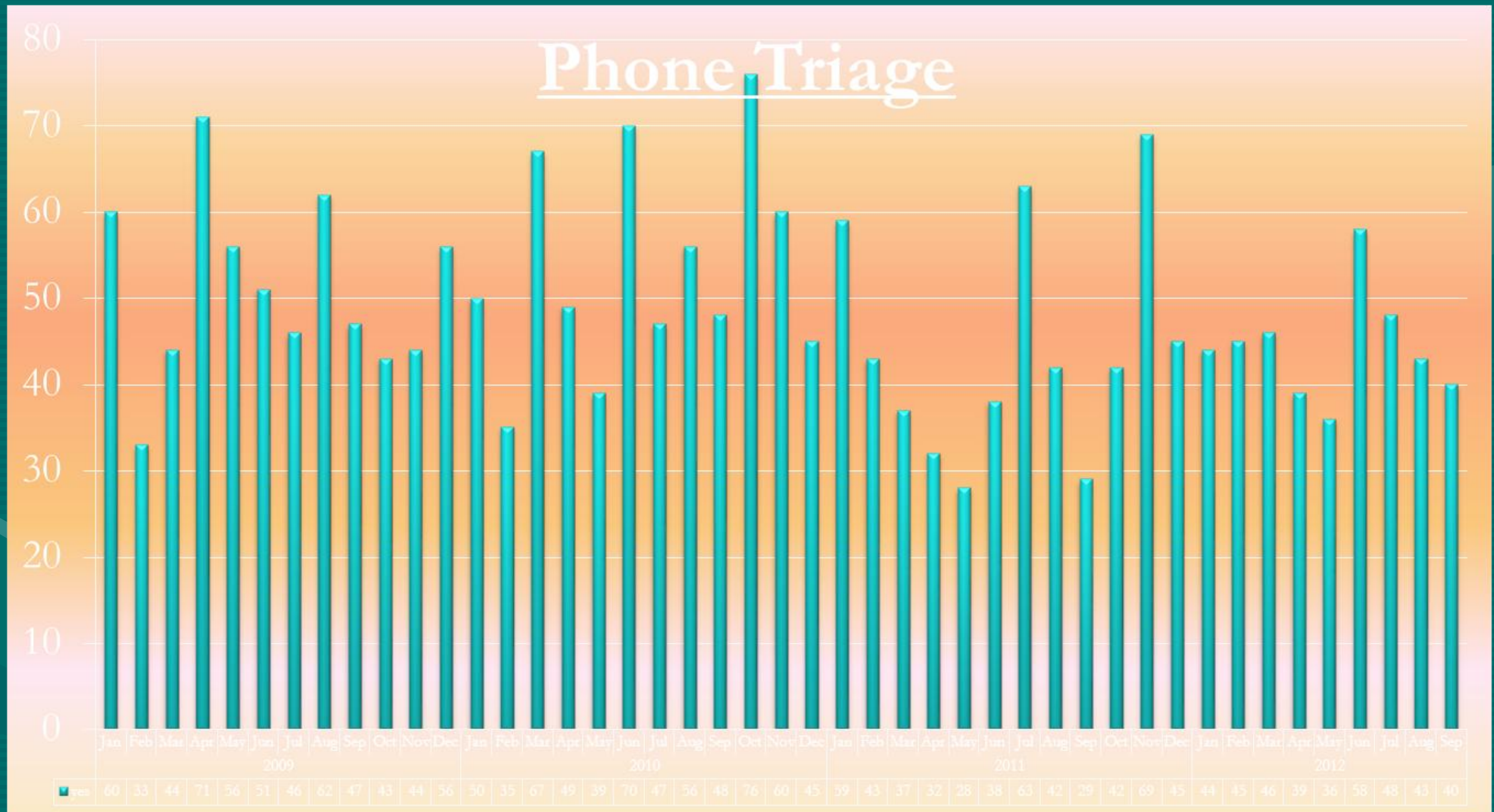
- ➢Be aware that this can be a very traumatic and difficult time for families and friends
- ➢make the resident as comfortable as possible

GRACE Outcome 2011

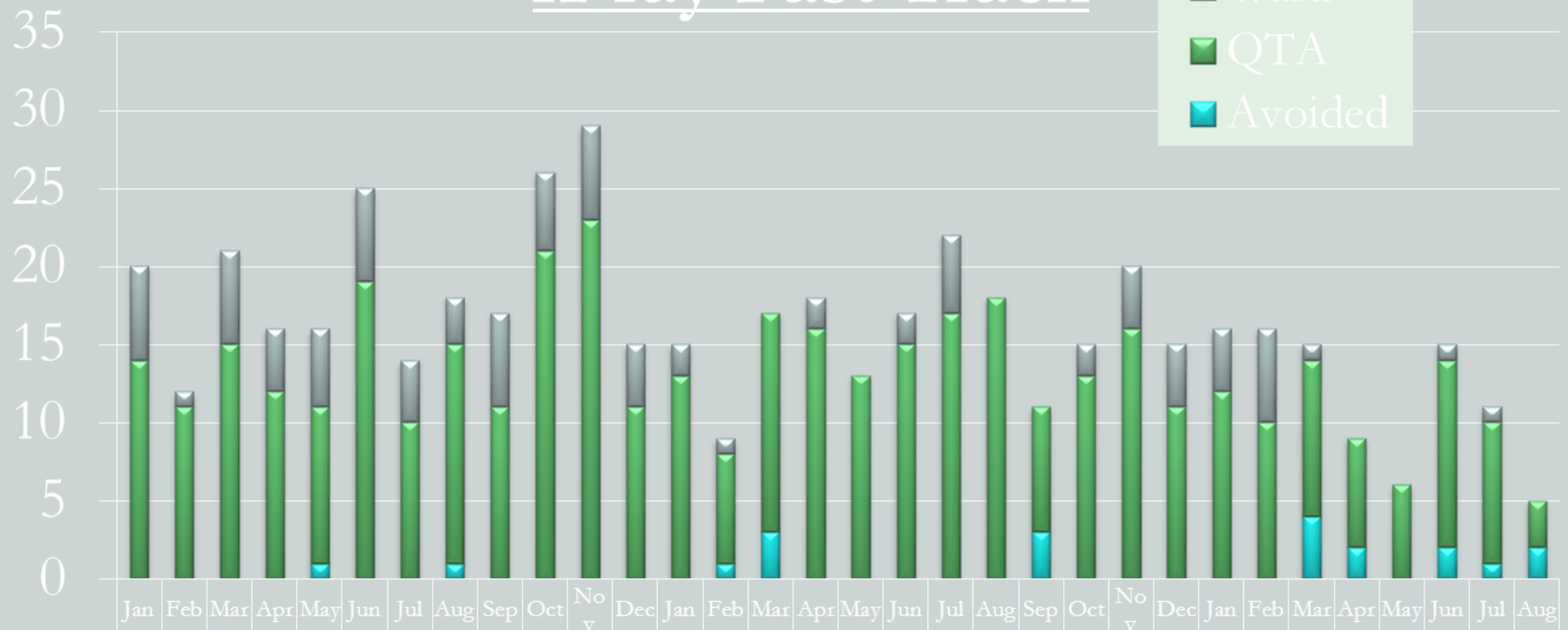
- 100% patient satisfactions
- Hospital presentation reduced by 47% (aimed for 20%)
- LOS in EMU reduced to 48 hours
- Access block reduced by 45% (aimed for 20%)
- ACD increased to 82% (aimed for 20%)
- 97% improvement for palliation and hydration at the NH
- 94% of NH RNs gained competencies for tube changing
- Sum of Avoidance reduced by 31%
- QTA increased to 47%
- Saved 3.3 bed days per patient per month
- Patient focused

GRACE & RACF's information sharing

GRACE phone triage



GRACE X-ray/ QTA

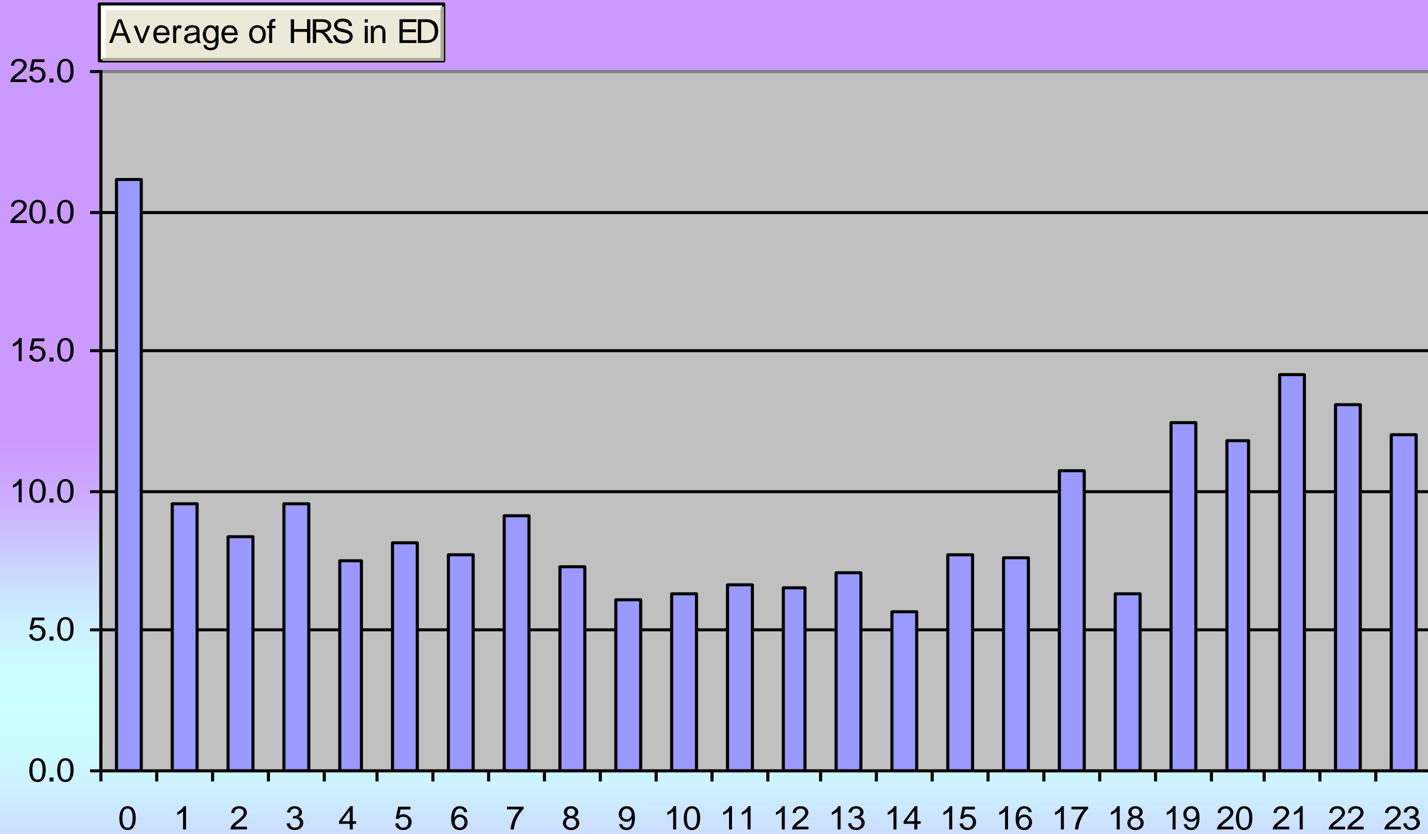


2010	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ward	6	1	6	4	5	6	4	3	6	5	6	4
QTA	14	11	15	12	10	19	10	14	11	21	23	11
Avoided					1			1				

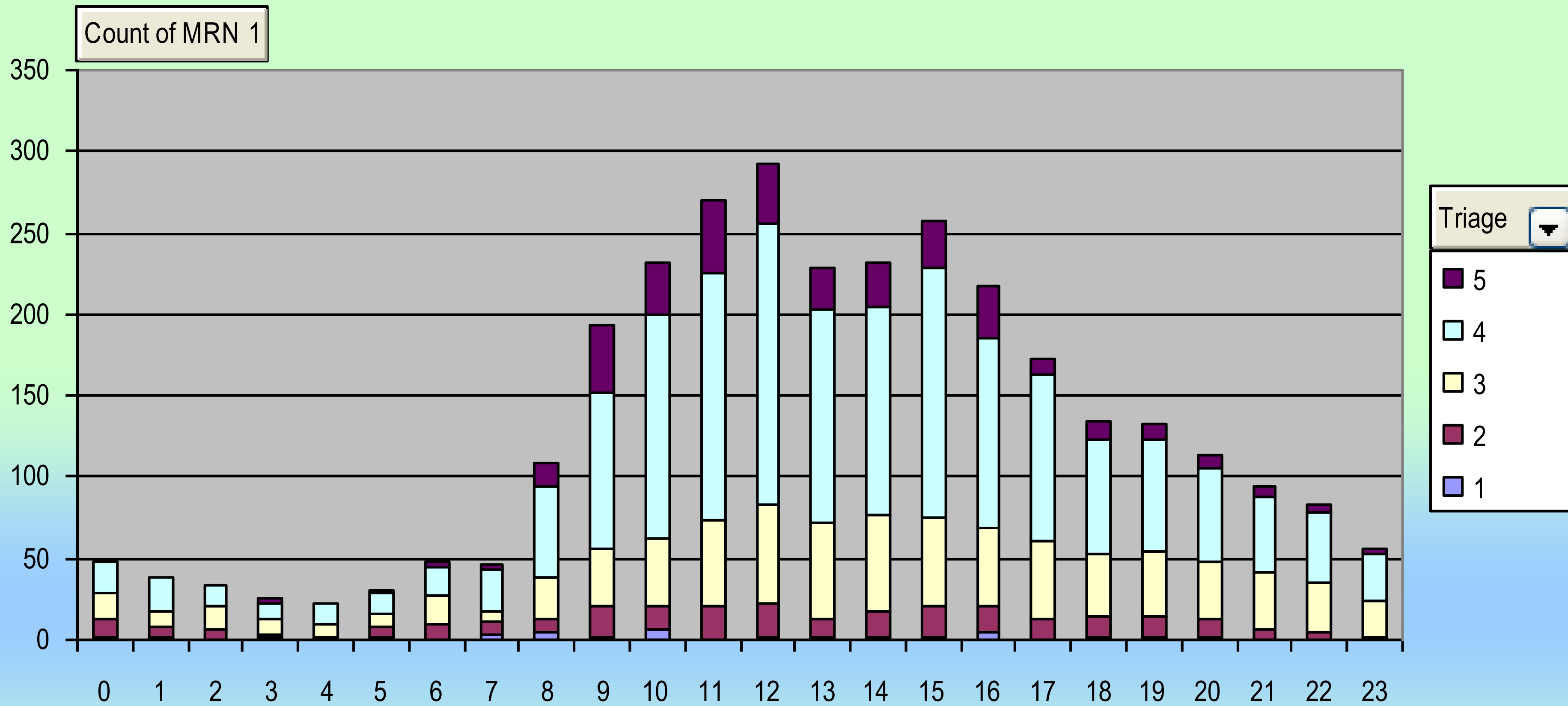
2011	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ward	2	1		2		2	5			2	4	4
QTA	13	7	14	16	13	15	17	18	8	13	16	11
Avoided		1	3						3			

2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Ward	4	6	1			1	1	
QTA	12	10	10	7	6	12	9	3
Avoided			4	2		2	1	2

Before GRACE hours of arrival



After GRACE time of arrival



GRACE Future Plans

- Extending fast track to radiology by-passing the emergency department
- IV Antibiotic's at the residential aged care facilities for cellulitis/GP shared care
- Facilitating blood transfusion bypassing the emergency department→48 hour ward
- Hand held Doppler and Bladder scan at the residential aged care facilities

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- Hornsby Kuring-gai area Nursing Homes staff
- Hornsby Kuring-gai General Practitioners