Triumphing the first battle - Integrated Care and Discharge Support (ICDS) for Elderly Patients in Hong Kong West Cluster

HA Convention 2014

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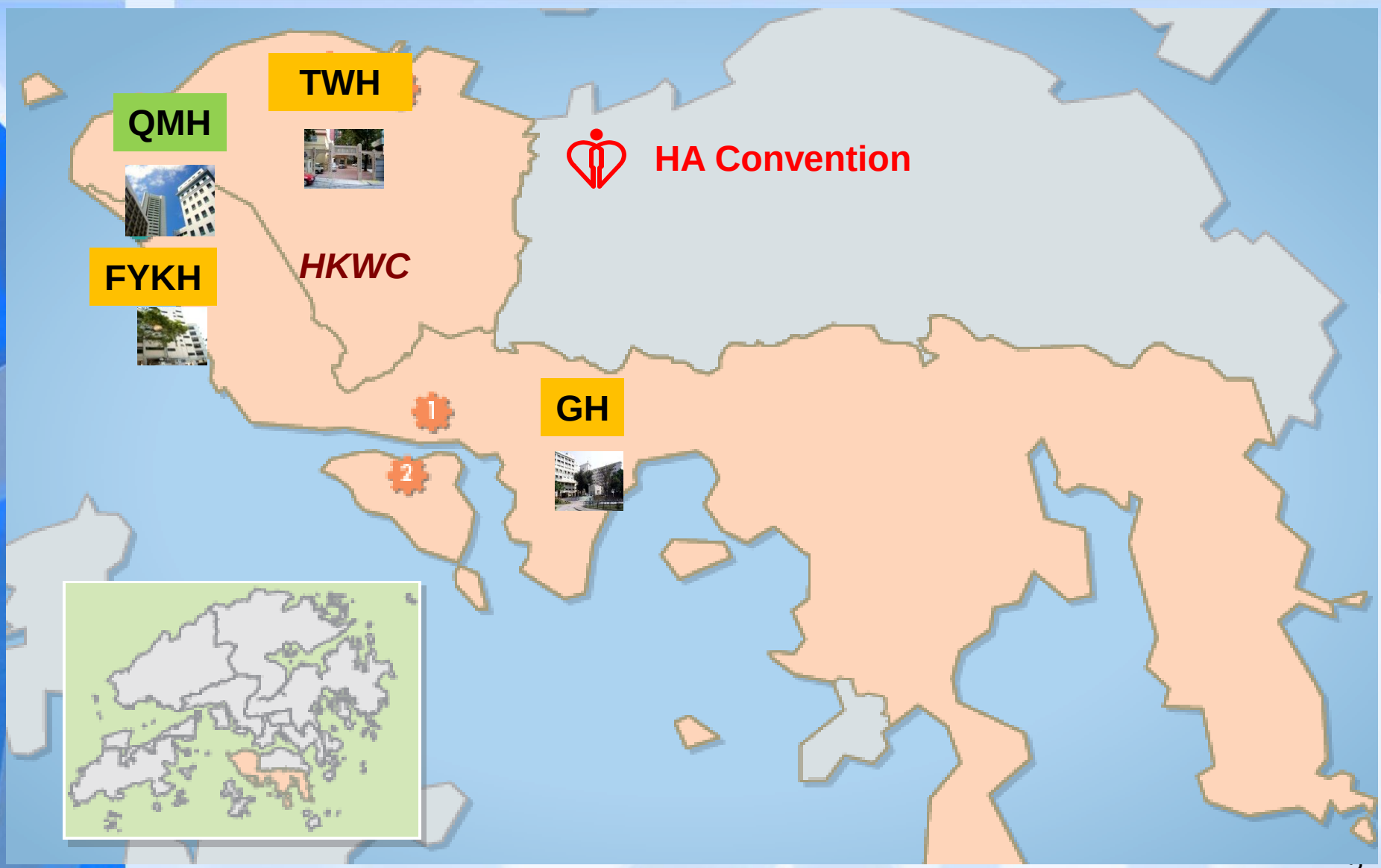
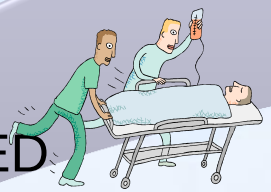


Patient Journey in HKWC

QMH General Medical Ward

AED



Elderly living at home

Convalescence Hospitals

FYKH

GH

TWH

Home

Revolving door syndrome

Inadequate community support

Algorithm of ICDS program in Hong Kong West Cluster (Commenced Jan 2012)

Hospital

Home dwelling older patient age ≥ 60 attended QMH AED

Medical wards in acute hospital (QMH) and convalescence hospitals (FYKH, TWH & GH)

Risk Stratification
High readmission risk detected by HARRPE score ≥0.2, Link Nurse screening or clinical referrals

CCPE beds (12 beds) in paired wards of QMH
Under usual medical team with
proactive geriatrician-led ICDS Discharge Planning Team (DPT) input

Comprehensive Geriatric Assessment and Discharge Planning
Geriatrician-led ICDS DPT

Community

ICM Case Management
Home visits and telephone support
By Case Managers
(PT, OT, MSW, Nurse)

Home Support Team (HST) rapid intensive multidisciplinary social support

香港仔坊會
社會服務
用心關懷 以心連繫

Link nurse performing assessment and discharge planning

ICM Case Manager home visit

5

Weekly Case Conference

HKWC Steering Committee
Community Care Services

→ **HKWC CCE**

Governance

SD P&CHC

ICDS Operational Meeting

Objectives and study period

Objectives

- To investigate whether the ICDS can reduce AED attendance, acute hospital admissions and hospital bed days (acute and convalescence)
  - Pre and post 6 months data analysis

- To identify independent factors that predict the efficacy of the program

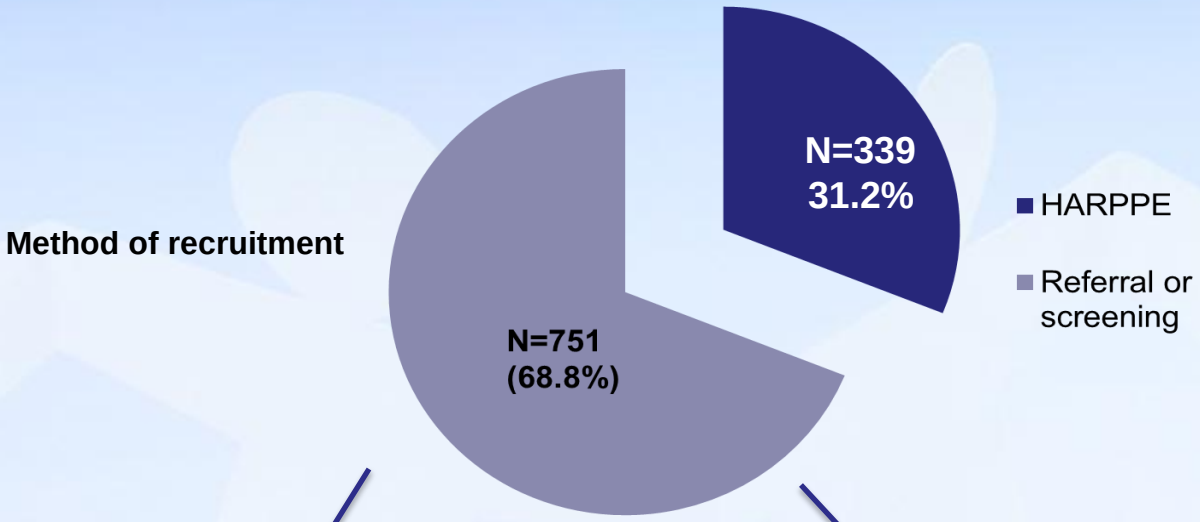
Study period

- April 2012 to March 2013

Results - Social and demographic characteristics

Total N = 1090	Age = 80.4 ± 7.6 (range 60 – 104) Female 51%	
	N	**(%)**
Caring situation		
Live alone	154	14.1
Live with maid only	24	2.2
Live with 1st degree relative(s)	698	64
Live with 1st degree relative(s) and maid	205	18.8
Live with friend	9	0.8
Daytime alone even with carer	322	29.6
Finance		
DA	69	6.3
HDA	7	0.6
CSSA	114	10.5
Depends on family/self/OA	900	82.6

Recruitment and service received



ICM Case Management
Home visits and telephone support

N=475 (43.6%)

Home Support Team (HST) rapid intensive multidisciplinary social support

N=615 (56.4%)

香港仔坊會
社會服務
用心關懷 以心連繫

Mortality and institutionalization

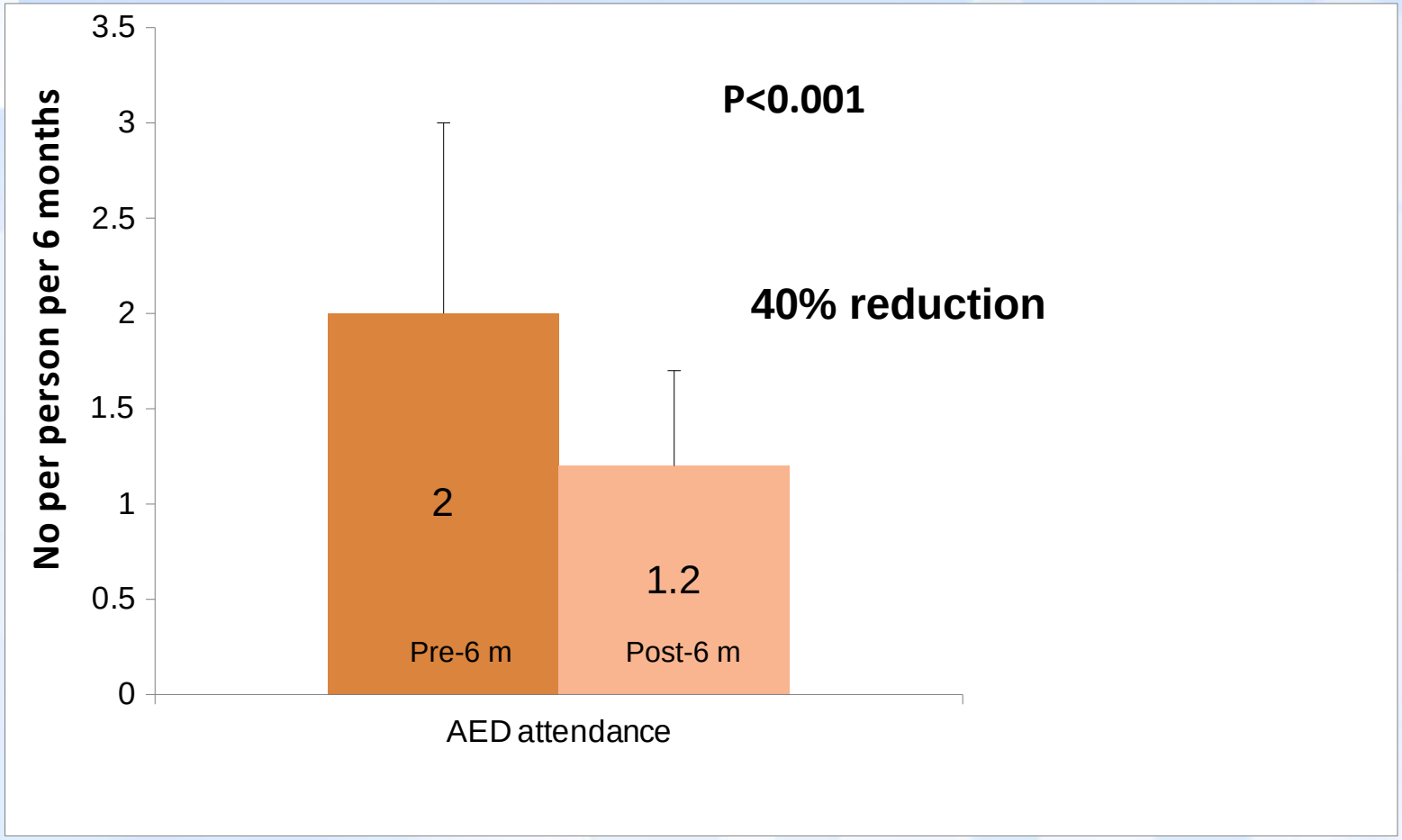
Mortality

- **85 (7.8%)** died within 6 months after ICDS recruitment

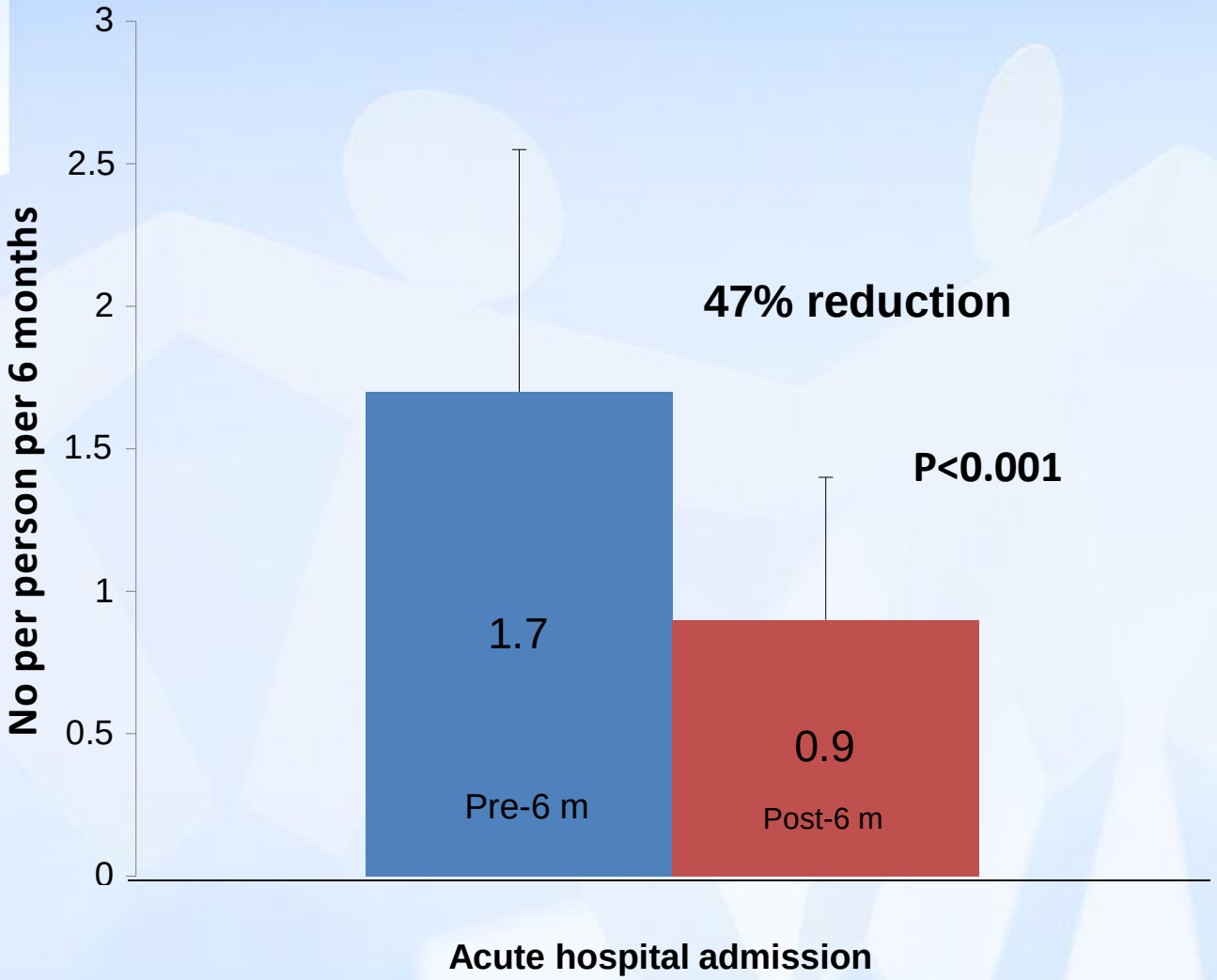
Institutionalization other than HST respite

- **26 (2.6%)** moved to RCHE within 6 months after ICDS recruitment
- (Our previous study – 21.7% needed to go to RCHE after recovery from medical illnesses
  - ***Luk JKH et al.*** *Arch Geront and Geriatr 49 (2009), pp. e110-e114*

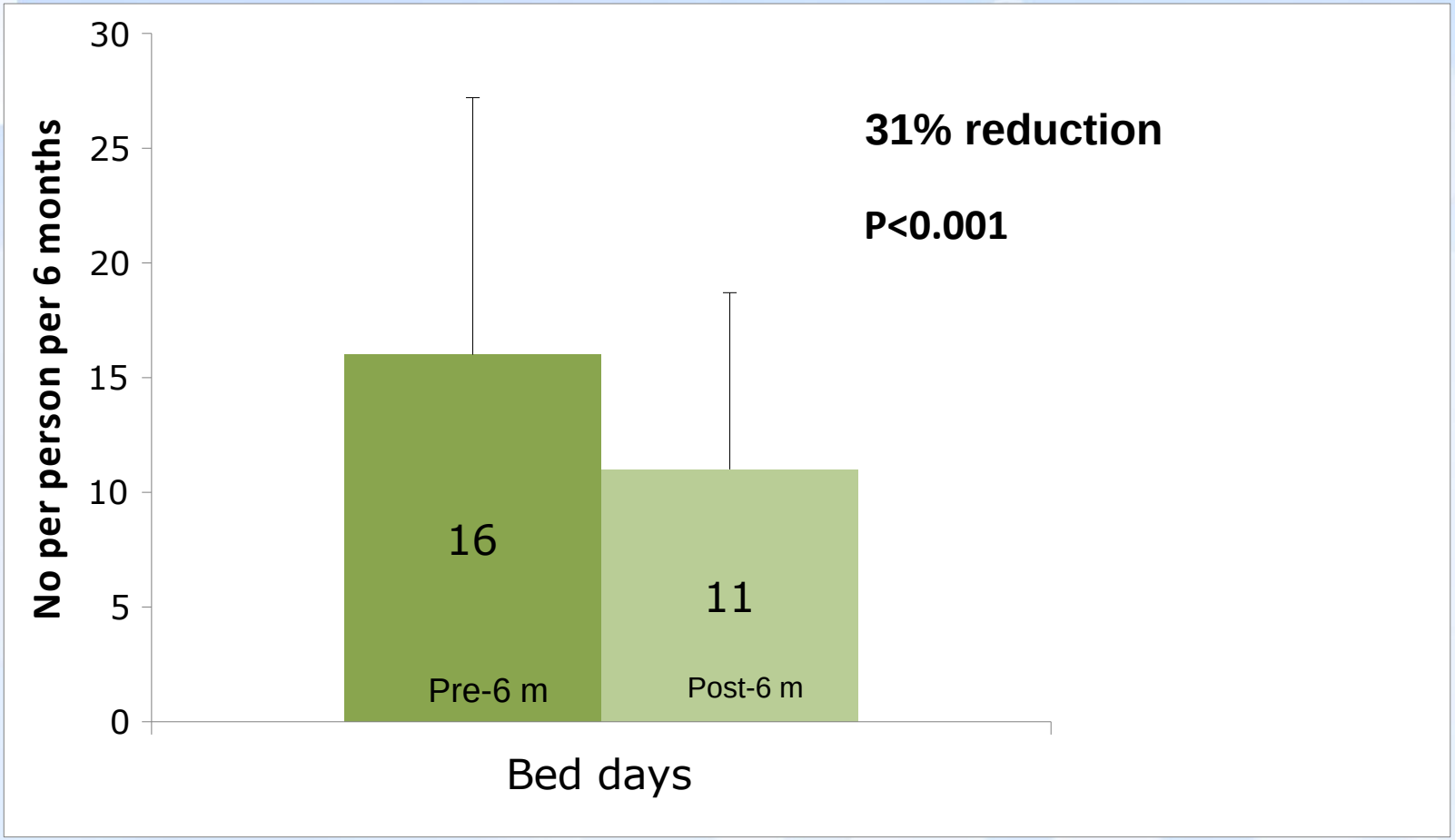
AED attendance 6 months before and after ICDS



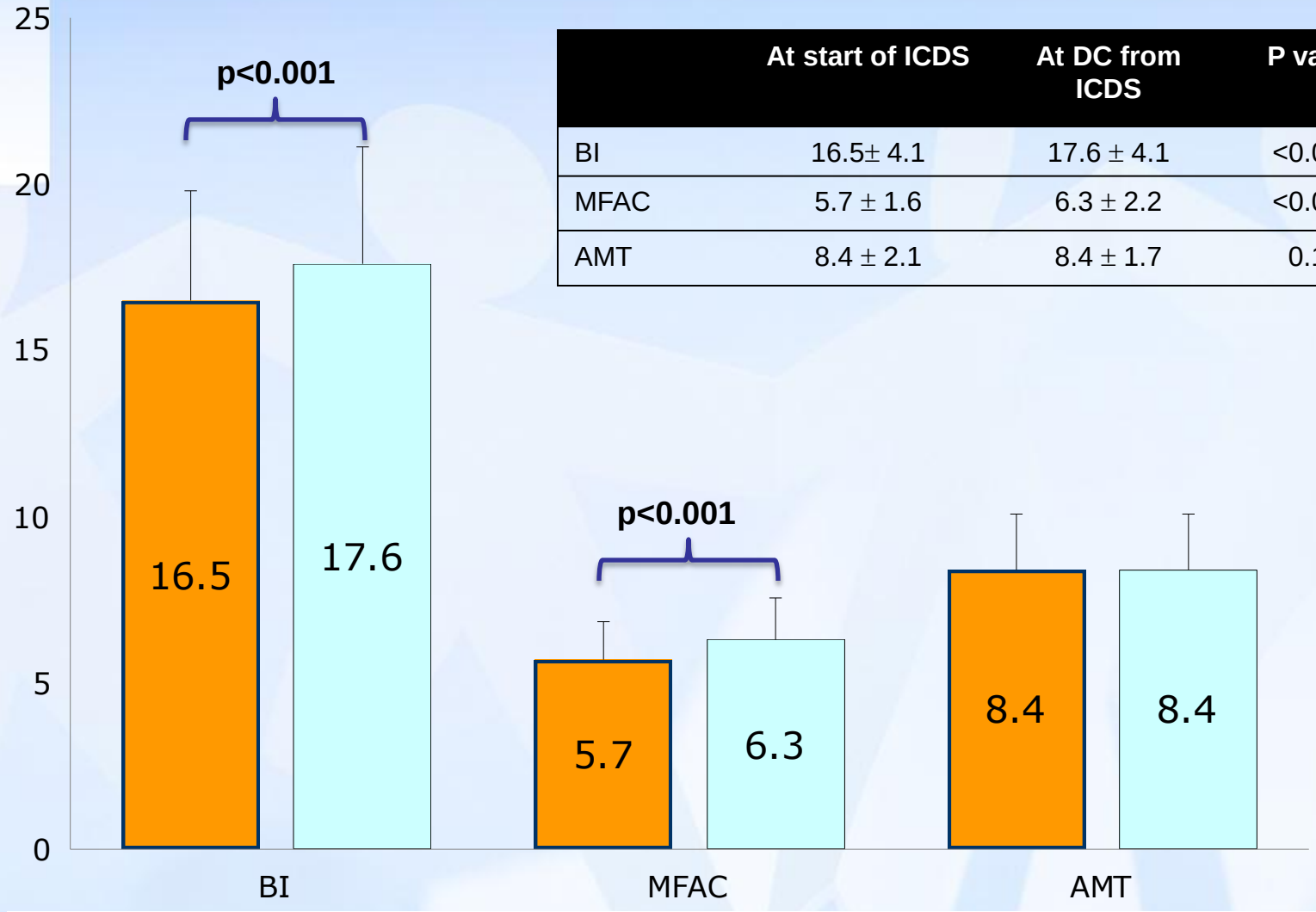
Acute hospital admission 6 months before and after ICDS



Hospital bed days (acute & convalescence) 6 months before and after ICDS



Change of BI(20), MFAC and AMT



	At start of ICDS	At DC from ICDS	P value
BI	16.5± 4.1	17.6 ± 4.1	<0.001
MFAC	5.7 ± 1.6	6.3 ± 2.2	<0.001
AMT	8.4 ± 2.1	8.4 ± 1.7	0.15

Multivariate analysis for factors at recruitment predicting ***AED attendance ≥1*** in the 6 months after ICDS commencement

599 (55%) had AED attendance ≥1 in the 6 months after ICDS (Logistic regression)

Factors (at the time of recruitment)	**Odds**	**95% CI**	**P value**
Age	1.02	1.0 to 1.036	0.025
Charlson Comobidity Index (CCI)	1.18	1.11 to 1.25	0.001
Albumin	0.96	0.94 to 0.98	0.001
Living alone	0.68	0.47 to 0.97	0.033

Multivariate analysis for factors at recruitment predicting ***no reduction in hospital bed days*** in the 6 months after ICDS

310 (28.4%) had no reduction in bed days
(Logistic regression)

Factors (at the time of recruitment)	Odds	95% CI	P value
Age	1.02	1.0 to 1.036	0.025
Hb	0.93	0.87 to 0.99	0.034
No. of medications	1.06	1.02 to 1.1	0.003

Conclusion and implication

- ICDS reduces:
  a) AED attendance (40%)
  b) acute hospital admission (47%)
  c) hospital bed days (31%)
- Keep elderly in the community, avoiding institutionalization
- Improve functional and mobility states
- Independent predictors identified - fine tuning to further improve efficacy
- Open ground for further studies e.g. cost analysis

Thank You!