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On the Front Line:
Frailty Screening and Management in Primary Care

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NUP Geriatric Lead

Overview of Presentation

- Background
- Screening for Frailty:
  - Collaboration with NUH
  - Results
- Proposed Comprehensive Assessment Frailty
- Proposed Interventions
- Summary
- Future Plans and Challenges

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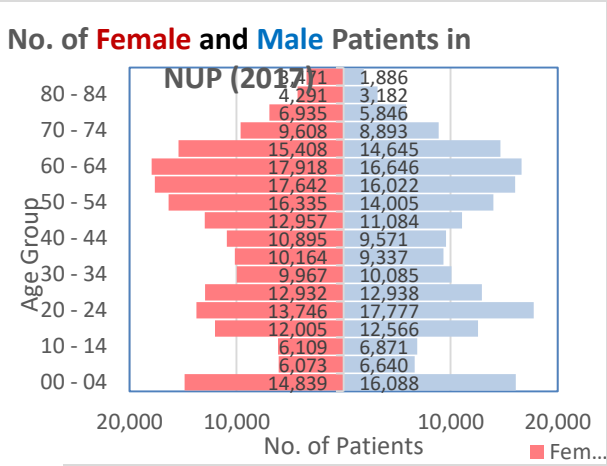
Background

Rationale

- Primary care deals most and best with multi-morbidity
  - NUP Patients > 65 yr: 74,165 (18.8%) in 2017
  - NUHS Population catchment >65: 153,736 (11.2%) in 2015



Review Article

Integrated Care: Enhancing the Role of the Primary Health Care Professional in Preventing Functional Decline: A Systematic Review

John E. Morley MB, BCh [a,*], Hidenori Arai MD, PhD [b], Li Cao MD [c], Birong Dong MD [c], Reshma A. Merchant MD [d], Bruno Vellas MD, PhD [e], Renuka Visvanathan PhD, FRACP, MBBS [f], Jean Woo MD [g]

- High community prevalence: 6.2% Frail, 37% Pre-Frail in 1051 elderly in Bkt Panjang(2017)

Original Study

Singapore Healthy Older People Everyday (HOPE) Study: Prevalence of Frailty and Associated Factors in Older Adults

Reshma A. Merchant MBChB, FRCP [a,b,*], Matthew Zhixuan Chen MBBS, MRCP [a], Linda Wei Lin Tan BSc (Hons), MPH [c], Moses YiDong Lim BSocSci (Hons) [b], Han Kwee Ho MBBS, MMed, MSX, PhD [d], Rob M. van Dam MSc, PhD [b,c]

Rationale

- Need to prevent frailty progressing to disability
- Early frailty or pre-frailty is potentially reversible
- There are available community services e.g. HAPPY/HEAL, Gym Tonic, Share-A-Pot

Special Article

The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty

Elsa Dent PhD [a,*], Christopher Lien MBBS, MPA [b], Wee Shiong Lim MBBS, MRCP, MHPEd [c], Wei Chin Wong MBBS [c], Chek Hooi Wong MBBS, MPH [d], Tze Pin Ng MD [e], Jean Woo MD [f],

5. Shared decision making between healthcare professionals, older adults, and their families should be facilitated when developing a management plan for older adults with frailty.
6. Practical recommendations for lifestyle modification should be provided for older persons with frailty, paying special attention to the incorporation of resistance training and adequate protein intake.
7. Identifying the treatable risk factors of frailty may prevent its progression— polypharmacy, weight loss, physical activity (resistance training), among others.
8. Education and support should be provided to older people and their caregivers. This training can be community based.

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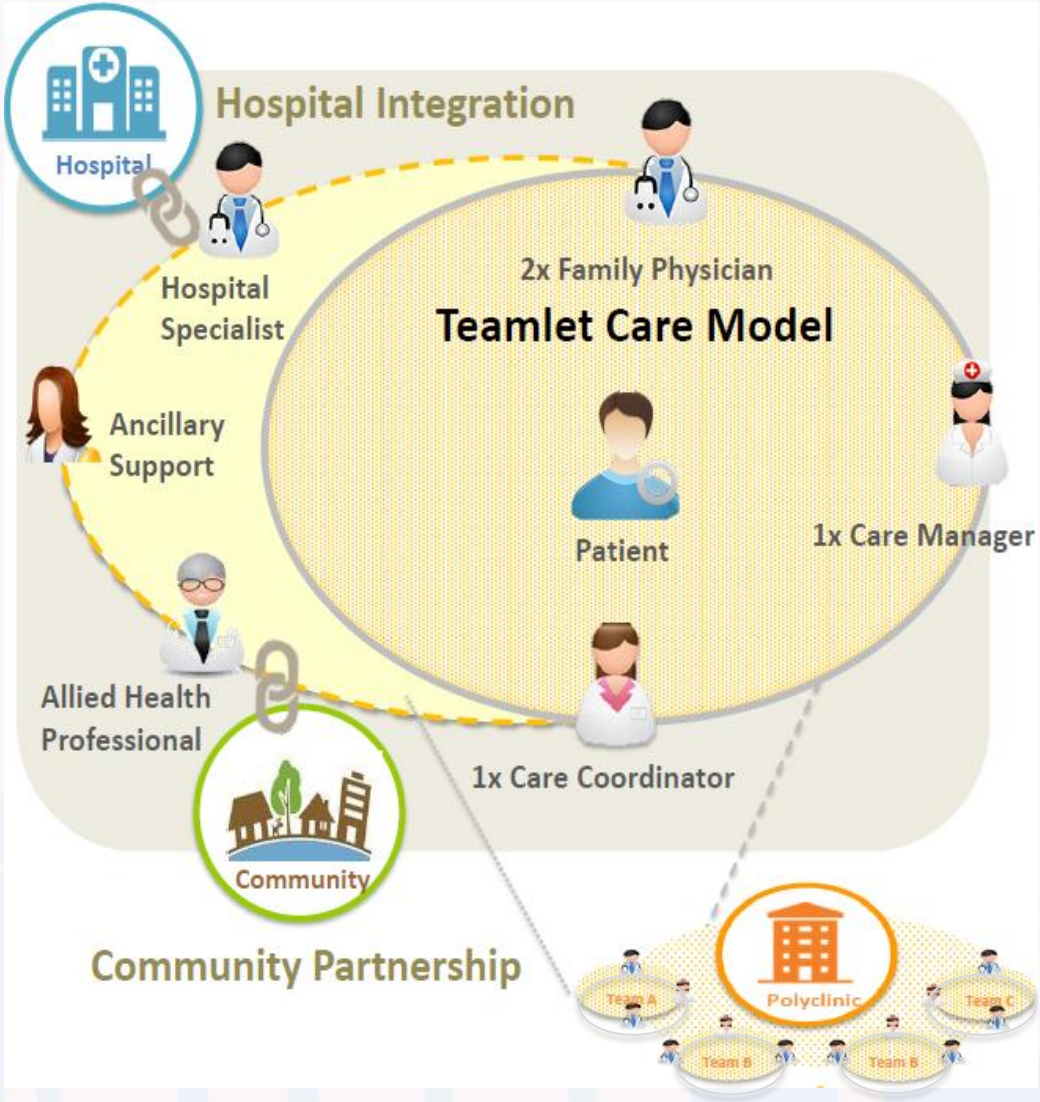
Frailty Screening at Bukit Batok, Choa Chu Kang Polyclinics

Objectives

- Focus on fixed panel of patients with Chronic conditions, managed by multi-disciplinary team



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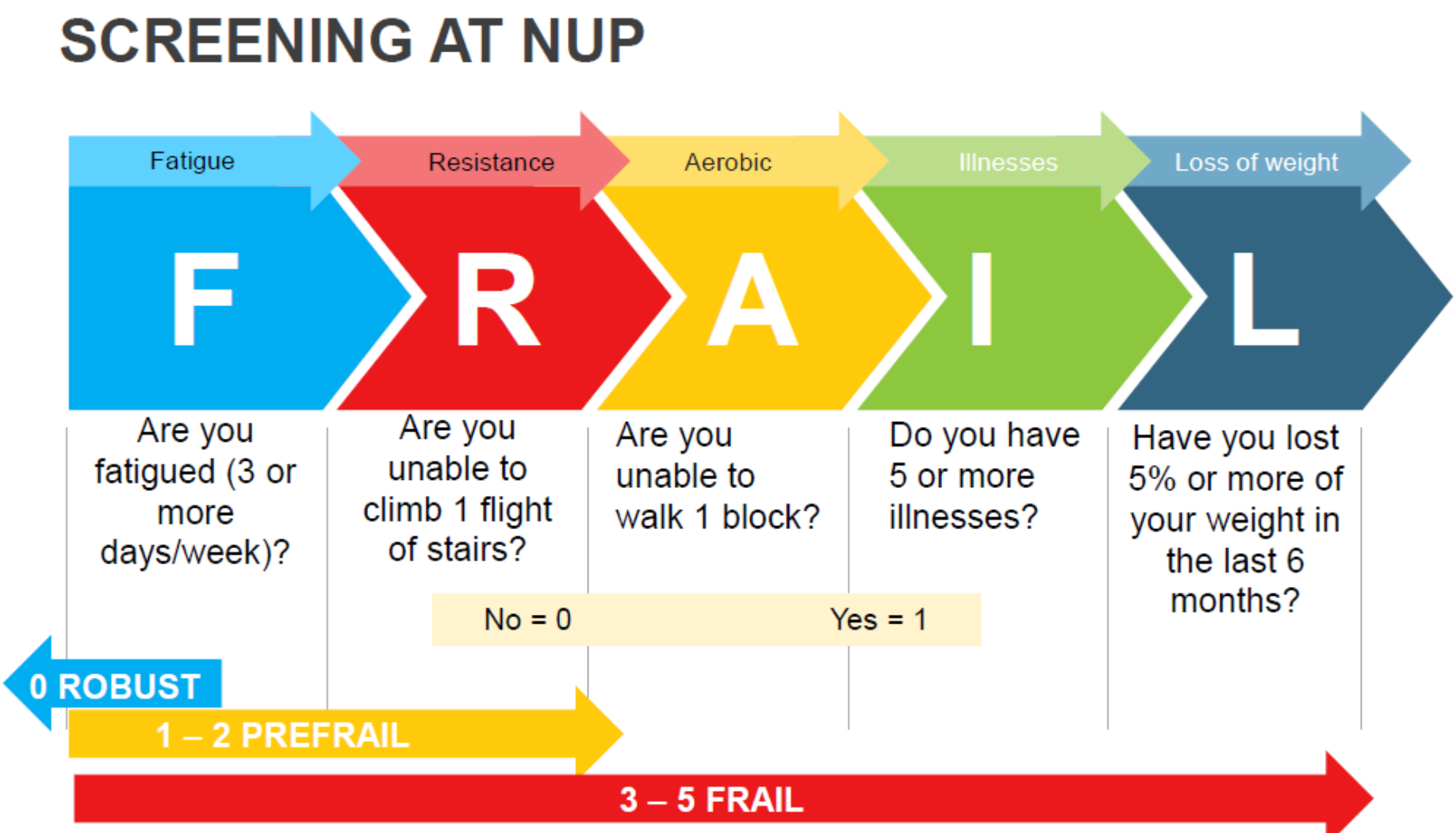
Objectives

- Screen patients >65 yr by Care Coordinators
  - BBK: targets patients with multi-morbidity (n=2310)
  - CCK: all categories (n=2577)
- Use FRAIL Questionnaire as Screening tool
  - Consists of 5 questions for diff domains
  - Trained by NUH GRM APN (HOPE Project)
- Offer different interventions according to available NUH-initiated community program:
  - BBK: HAPPY: dual exercise + cognitive program
  - CCK: HEAL: education program

Screening Tools

- FRAIL questionnaire: (by Morley et al)
  - Score: 0=Robust, 1-2=Pre-Frail, ≥ 3=Frail



	Screening Question / Score	Yes (1 Point each)	No (0 Point each)
1	Are you fatigued (extreme tiredness due to mental or physical exertion or illness) **3 or more** days a week?		✓
2	Are you **unable** to walk up one flight (10 steps) of stairs without resting?		✓
3	Are you **unable** to walk from one block to another alone without using any aids (e.g. walking stick, walking frame)?		✓
4	Do you have **5 or more** illnesses? (E.g. diabetes, high cholesterol, high blood pressure, heart failure/attack, asthma, kidney disease, cancer etc)		✓
5	Have you lost 5% or more of your weight in the last **6 months to 1 year**? (weight 6 months to 1 year ago – current weight x 100)		✓
	Total Score	0	

For official use:	Happy-Heal (offered/declined)	Noted Weight loss, see Dr. (Indicate Yes / No)
Date: _____ Name of Staff: Nooradlin Marina Registered Nurse Designation: _____	NA	NO

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HAPPY/HEAL Program

Healthy Ageing Promotion Programme for You (HAPPY)

HEALTH EDUCATION & ACTIVE LIFESTYLE (HEAL)

HAVE FUN WHILE MAINTAINING A HEALTHY BODY, HEALTHY MIND

NUH National University Hospital | NUS National University of Singapore | Yong Loo Lin School of Medicine

WHAT IS THE COMMITMENT REQUIRED FOR "HAPPY" EXERCISE ?

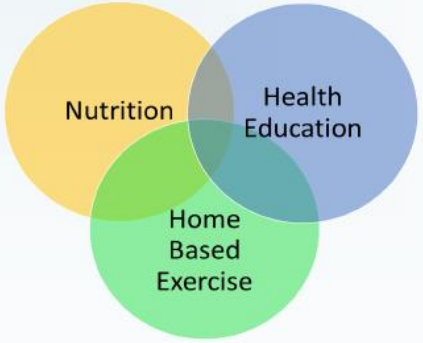
Participants will attend TWICE WEEKLY exercise program for healthy body and mind.

WHAT IS THE COMMITMENT REQUIRED FOR "HEAL" ?

Participants will receive advice and education on active lifestyle, cognitive activities and nutrition.

In addition, both groups will receive assessment on memory and physical function up to four times in a year.

"HEAL" comprises of



WHAT IS "HAPPY" and "HEAL"?

"HAPPY" and "HEAL" are two separate interventions targeted at the older adult aged 60 years old and above. Both programs aim to promote healthy ageing through dietary and healthy ageing advice, and either centre -based exercise or home based exercise.

"HAPPY" and "HEAL" seeks to delay:

- Physical frailty
- Cognitive frailty
- Social frailty

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Outcome of Pilot Screening (24 Apr 2018 – 31 Jan 2019)

	CCK (n=1120)*	BBK (n=759)*	TOTAL (n=1879)*
% Robust (Score=0)	65.7%	45.1%	57.3%
% Pre-Frail (Score=1-2)	28.3%	42.7%	34.1%
% Frail (Score ≥ 3)	6.0%	12.3% **	8.5%
Intervention takeup rate (pre-frail pts)	57.4%	42.9% (136/298)	
Intervention takeup rate (frail pts)	37.3%	45.2%	

* Response Rate inaccurate as not all patients have been approached yet by CC/CM

** BBK screened more patients with Multi-morbidity

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Proposed Comprehensive Assessment

Proposed Assessment

- Due to start in BBK, CCK in Jul 2019
- Focused on frail patients with FRAIL score ≥ 3 (KIV Pre-Frail)
- Weekly NUP Multi-disciplinary Assessment:
  - CC/CM/Physio/FP Drs: estimated 20 min per staff
    - CC: Social and Psychological Domains
    - CM: Physical Domain – Functional assessment
    - Physiotherapist: Physical Domain – gait, strength etc
    - Dr: Medical Domain. Consolidate problem list and create patient-centered care plan.
  - Every Wed PM (BBK), and Fri PM (CCK)
  - With monthly MDT
- Trained by NTFGH Geriatric Services Hub (Geriatrician, APN/CM, PT) for 2 yrs (2019-21)

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Proposed Interventions

Proposed Interventions After Assessment

- Referrals to AHP acc to patient need
  - PT: Refer to NUP PT or to community /RHS partners
  - Dietitian, Clin Pharm, MSW
  - Community/RHS partnerships: e.g. St Luke's Hospital/Eldercare

SUMMARY

Screen

- **CC** Screens Teamlet patient (> 65 yr old) with FRAIL
  - Score 0: Robust - Usual care
  - Score 1-2: Pre-frail - **CC** Refer HAPPY (BBK) or HEAL (CCK) + **DR** orders Frailty related Ix: TSH, B12, Hb
  - Score ≥ 3: **CC** Offers Comprehensive Geriatric Assessment
- NUH GRM APN to train FRAIL (completed Apr 2018)

Assess

- **CC, CM, DR** conduct Comprehensive Geriatric Assessment (20 min each)
- PT (from NTFGH): grip strength, TUG
- NTFGH GRM GSH to train (starting Jul 2019)

Manage

- Dr consolidate problem list and come up with patient-centered care plan
- Refer to relevant allied health: **PT, MSW, Psych, Dietitian, Clin Pharm**
- Link patient up to relevant Community resources

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Future Plans and Challenges

Proposed Plans

- Consider roll out to other NUP clinics
- Frailty Assessments can be catalyst for starting ACP
- Future collaborations with Community Partners
- Tablet based Rapid Geriatric Assessment (NUH HOPE project)
- Research project on Risk Factors associated with Frailty and RF control in polyclinic

Challenges

- Barriers to Assessment uptake:
  - need more subsidy after NTFGH grant ends
  - Patient and Caregiver willingness
- Barriers to Intervention uptake:
  - Suboptimal HAPPY/HEAL enrollment: > increased recruitment efforts by NUH staff

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Thank you

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- Bukit Batok Polyclinic
- Choa Chu Kang Polyclinic
- Clementi Polyclinic
- Jurong Polyclinic
- Pioneer Polyclinic
- Queenstown Polyclinic