Assessing the Adoption and Feasibility of the Hong Kong Reference Framework for Preventive Care for Older Adults: A Cross-Sectional Survey of Primary Care Physicians

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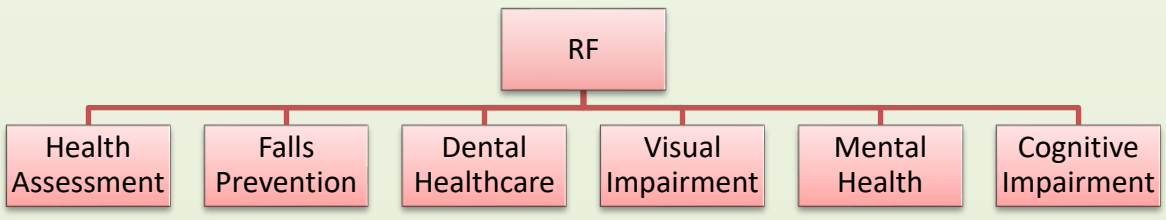
Introduction

- *Hong Kong is shifting to an ageing society, projected that the elderly population will exceed 2.62 million, accounting for 37% of the total population by 2066*
  - *Aging-related adverse conditions, such as falls, visual impairment, and poor lifestyles, pose a heavy burden to individuals and society*
  - *Adoption of a clinical guideline is a key strategy in alleviating these burdens and improving disease management.*

- *Reference Framework for Preventive Care for Older Adults in Primary Care Settings (RF)*
  - 6 modules were included to respond to the health issues among the elderly population in Hong Kong:



Aims

- *(1) Assess the level of awareness and utilization of the RF;*
- *(2) Identify factors that facilitate or hinder the adoption of RF among primary care physicians (PCP)*

Methods

Study Design

- Cross-sectional study

Eligible Participants

- All PCPs who are responsible for providing preventive care to older adults in both private and public primary care setting in Hong Kong were included

Sample Size calculation

- Assuming 50% (proportion p) of participants reported the outcome of interest, a total of 385 valid responses are required to achieve a precision level of 5%. [$N=1.96^2 \times p(1-p)/precision^2$]

Survey Instruments

- Adoption level of various recommendation from the RF
- Attitude towards the implementation (Appropriateness/Acceptability/Feasibility) of RF
- Guideline/Patient/PCP/External environment-related enablers and barriers

Statistical Analysis

- Descriptive data were performed in count and percentage format
- The difference in adoption between PCPs in private and public settings was analyzed by the Chi-square test
- Univariable and multivariable logistic regression were adopted to examine the factor association with the implementation outcome

Result

1. Participants Characteristics

A total of 485 PCPs were included, comprising 241 (49.7%) from private settings and 244 (50.3%) from public settings.

- **Age distribution**: Most of the PCPs are aged 36-50 years
- **Sex:** 276 males; 209 females
- **Year of practice:** Most of the participants with less than 16 years of practice (36.9%)

2. Adoption of Recommendation

❖ Adoption rates varied considerably between recommendations, ranging from 17.5% to 92.8%.

- Recommendation with the **highest adoption:**
  - Annual seasonal influenza vaccination (92.8%)
  - Advice on quitting smoking (88.7%)
  - Screening for hypertension (88.5%)
- Recommendation with the **lowest adoption:**
  - Screening for urinary incontinence (17.5%)
  - Screening for hearing impairment (19.8%)
  - Promotion of oral hygiene (25.4%)

❖ **Higher adoption of recommendations among PCPs in private settings** compared with PCPs in public settings

3. Enablers and Barriers for RF adoption

Key Enablers

- Role on improve patient knowledge(96.7%)
- Inclusion of essential clinical information (96.5%)
- High quality evidence (96.3%)

Key Barriers

- Limited consultation time (94.2%)
- Low motivation for patient to change lifestyle (90.7%)
- Limited resources (90.1%)

4. Attitude towards the implementation of RF

❖ PCPs are optimistic about RF, with **71.3%, 78.1%, and 65.6%** of PCPs believing that **RF is appropriate, acceptable, and feasible**, respectively, especially those working in the private sector. **(Table 1)**

	Overall (N=485)	Private (N=241)	Public (N=244)	p
Appropriateness of the RF	346 (71.3%)	178 (73.9%)	168 (68.9%)	0.263
Acceptability of the RF	379 (78.1%)	198 (82.2%)	181 (74.2%)	**0.044**
Feasibility of the RF	318 (65.6%)	178 (73.9%)	140 (57.4%)	**<0.001**

Table 1. Attitude towards the implementation of RF

5. Factors associated with attitude towards the implementation outcome

- ***PCPs managing 30–59 patients per day*** remained significantly more likely to perceive the RF as ***applicable*** (OR = 2.123, 95% CI: 1.201–3.753, p = 0.01).
- ***PCP in the public sector*** were ***significantly less likely to perceive the RF as acceptable*** (OR = 0.536, 95% CI: 0.297–0.967, p = 0.038) and ***feasible*** (OR = 0.574, 95% CI: 0.342–0.962, p = 0.035), as compared to PCPs in the private sector.

Conclusion

- The adoption of the RF is suboptimal, highlighting the time and resource requirements for RF adoption.
- PCPs recognized the patient's low intention to change as a significant barrier, likely related to their anticipation of care failure.
- RF's recommendations were adopted at highly variable rates. Those related to common conditions were more often implemented, while recommendations for less common issues were less frequently adopted.

Acknowledgements

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