

Safe care for your older hospitalized patients



Jita Hoogerduijn PhD, RN

Care for the Chronically Ill Research Group

Hogeschool Utrecht, University of Applied Sciences

Mrs. Anna Smith

**82 years old and living independently
only needing help in traveling and housekeeping**



- Hospital admission
 - suffering a flue and a pneumonia with high fever
- Disoriented and confused sometimes
 - delirium diagnosed after **5** days!
- Fall during the night
 - trying to use the toilet
- 3 weeks of hospital stay
- Discharged needing assistance in ADL
- **Loss of autonomy and independency**

Dutch policy : safe hospital care

- Development of a safety program: Prevent Damage, Work Safe!
- Aim: 50% reduction of unintended damage as a result of hospital admission
- Program: 10 themes

Theme 5: To prevent unintended damage in older patients with specific care for

- Recognizing and prevention of delirium
- Fall prevention
- Prevention of decreased mobility
- Prevention of malnutrition

Overall aim: to keep older people independent and able to participate in the society

Demographics (RIVM 2009)

- 15% of the Dutch population is >65 (EU 18%)
 - 26% of these are >80
 - In 2050 25% is older than 65
- **For Western Europe**
 - 2008 17.8%
 - 2020 20.9%
 - 2040 28.1%

Life Expectancy

- Increasing
- More older people of 85 and over
- More women
- More singles
- More older people with higher education

Changes when we grow older

- Genetic markers are the basis
- Problems
 - Physical
 - Social and psychological
 - Functional (ADL and IADL)
- Multi-morbidity
 - > 1 chronic illnesses
 - 2/3 of all people aged >65
 - 85% of all people aged >85

Are we all equal?

- Many differences
- Healthy and active 80+
- And very dependent and inactive 80+
- Different pathways leading to functional dependency
- Different risk factors
 - like delirium, falls, malnutrition, mobility and (I)ADL problems





Hospital care for the older patients

Older patients in the hospital

In 2005 per 10.000 inhabitants

- Age 65 -80: **2327.1** hospital admissions
- Age >80: **3116.2** hospital admissions

Compare

- All ages **1037.7** hospital admissions

– (www.statline.nl)

Functional decline after hospitalization

- 30-60% of the older hospitalized patients
- Functional decline = ADL and /or IADL decline



Consequences

- Increased LOS
- Increased readmission
- Decreased quality of life and autonomy
- Increased mortality rate
- Increased institutionalisation (nursing home)
 - Fortinsky 1999, Covinsky 1997
- Increased risk for development geriatric syndromes and further decline
 - o.a. Inouye 2007
- **Increased personal and health care costs**

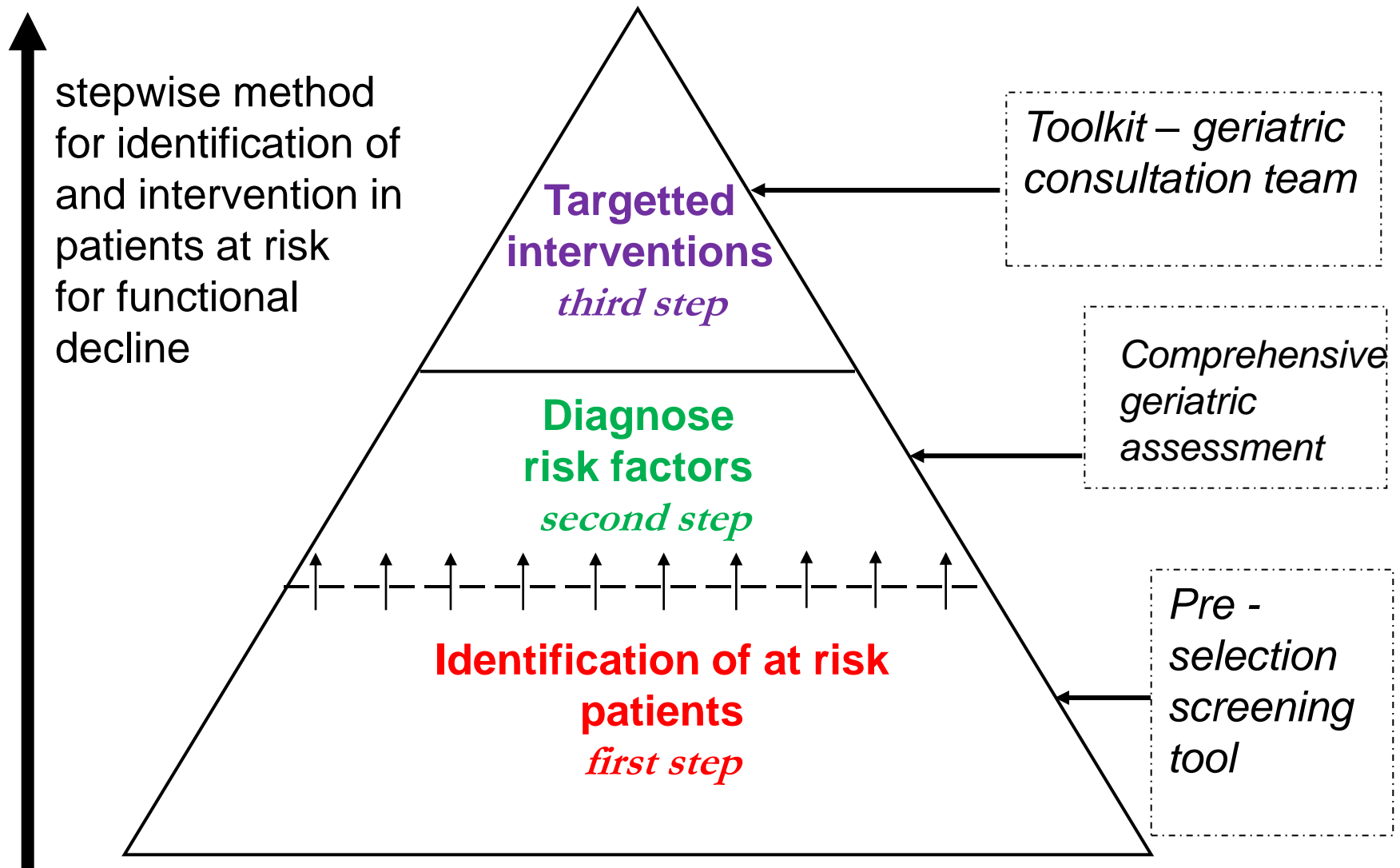
PhD study to prevent functional decline

Jita G Hoogerduijn



- In acutely hospital admitted patients
- To predict functional decline
- To identify patients at risk for functional decline

DEFENCE model



Step 1 and 2 :

Literature review + comparative study

- 3 instruments, different population and aims
 - McCusker 1999, Sager, 1996, Huyse, 2001
- A list of predictors of functional decline
 - like existing ADL and IADL dependency, falls, incontinence, delirium, depression
- Best discriminative value:
 - Identification of Seniors At Risk (ISAR)
 - developed in ED in Canada (Mc Cusker 1999)
- No instrument for acutely admitted older patients on internal medicine wards

Step 3:

A new prediction model

- Development and internally validation of a prediction model to predict functional decline in acute hospitalized older patients
- Cohort study: April 2006 - April 2008
- Internal medicine patients (≥ 65) acutely admitted to hospital (n=492)
- 35% functional decline

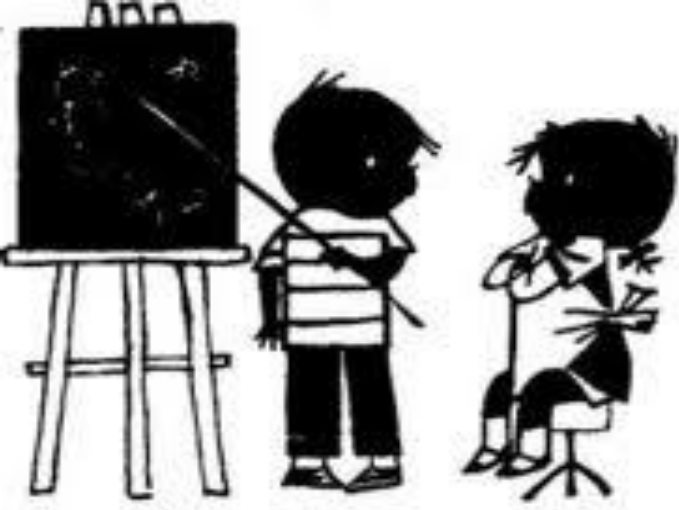
Step 4:

Validation in an independent population

- Secondary analysis
- Cohort study: Nov 2002-April 2006
- Internal medicine patients (≥ 65) acutely admitted to hospital (N=484)
- 32% functional decline

Step 5: Validation in a new population

- Cohort study: Jan 2006- April 2008
- Older (≥ 65) cardiac surgery patients (n=475)
- 16% functional decline



Education after age 14?

Assistance in traveling?



ISAR-HP



Use of a walking device?

Pre-admission need of assistance in IADL?

Identification of Seniors At Risk - Hospitalized Patients

ISAR-HP		
	yes	no
Before hospital admission, did you need assistance in IADL (e.g. housekeeping, preparing meals, shopping etc.) on a regular basis?	1	0
Do you use a walking device (e.g. cane, rollator, walking frame, crutches etc)?	2	0
Do you need assistance for travelling?	1	0
Did you pursue education after age 14	0	1
Total score		
Total score 0 or 1 = not at risk		
Total score ≥ 2 = at risk for functional decline		

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- Loss of autonomy and independency
- With ISAR-HP she should have been identified as a patient **at risk** for functional decline

How to use in daily practice?

Final Conclusion

- Become a “**senior safe**” hospital!
- Paradigm shift: **Focus** on daily functioning
- **Prevent** complications and functional decline
- **Be aware** of the geriatric problems of older and vulnerable patients
- **Use** the **ISAR-HP** to identify those at risk
- Develop a **special program** for these older patients