Recommendations from the MPI_AGE European Project

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CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report
Using Multidimensional Prognostic Indices to improve cost-effectiveness of interventions in multimorbid, frail older persons

Recommendations
How to improve cost-effective interventions in health-care

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Three sets of recommendations based on MPI_AGE project
Health interventions should be adapted to individual needs of older patients, especially for those with high disease burden, high complexity or relevant major physical and mental impairments.
Individual needs should be **objectively assessed** by means of validated instruments. These instruments should be **multidimensional** in order to capture all relevant domains.
Objective assessment of needs may avoid discrimination of older people (ageism) in decision-making.
The **Multidimensional Prognostic Index (MPI)** has proved to be the best validated assessment instrument in various healthcare settings (community, hospital and nursing homes) and across a wide range of diseases and conditions.
MPI also identifies problems in several domains that may benefit from specialist comprehensive geriatric care.
Tailored healthcare interventions have the potential to **reduce the inappropriate use of resources** (hospitalizations, drugs, diagnostic and other procedures) and to **allow well-established treatment and interventions** to be used in older people who **can benefit** from them.
Tailored healthcare interventions have the potential to reduce inappropriate health-related costs.
MPI can be adapted for use in population-based (Primary Care) and disease-oriented **databases** to accurately predict **survival** and **other health outcomes**.
MPI can be used to explore how evidence-based knowledge of drugs and invasive interventions applies across different levels of frailty, complexity and life expectancy.
In hospitalized older persons MPI identifies groups at risk for several hospital outcomes (i.e. mortality, length of stay, use of diagnostic tests). Individuals within each risk group may benefit from the adaptation of interventions to his/her prognosis and needs.
In hospitalized older persons MPI predicts several post-discharge outcomes: one-year mortality, rehospitalisation, admission to a nursing home, use of home-care services.
Changes in MPI during hospitalization
predict long-term mortality and
use of home-care services.
The role of MPI as a **potential outcome measure** for interventions needs to be explored.
Personalized medicine is feasible in older patients by proper multidimensional assessment. MPI has shown to be an excellent tool for this. Tailored health care benefits patients, health care systems and the society as a whole.