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## Introduction

- **Risk stratification** is a population health management approach that classifies patients according to their health risks and projected care needs [1].
- This strategy is especially valuable in **primary care**, where timely interventions for high-risk individuals can lead to better health outcomes, reduced healthcare expenditures, and a more sustainable healthcare system [2].

# Objective

This study aimed to establish **expert consensus** on the clinical and sociodemographic patient factors that should be incorporated into a primary care risk stratification tool.

## Methods

## Study Design and Data Collection

- This mixed-method, consensus-based study was conducted by the Local Health Authority of Parma (Italy), in collaboration with the University Hospital of Parma and Thomas Jefferson University (TJU).
- A multidisciplinary panel of **24 healthcare** professionals (primary care providers PCPs, specialists, and allied health providers) was convened in June 2024.
- Nominal Group Technique [3] was used to define "health risk" and identify contributing clinical and social factors available in primary care electronic medical records (EMRs).
- A 3-Round Modified Delphi process was conducted from July to October 2024 following ACCORD guidelines [4]:
  - Survey was distributed to panelists to rate the importance of each factor using a **9-point Likert scale** (1 = no importance, 9 = critical importance)
  - Consensus was defined as ≥75% agreement among participants
  - Final weights for each factor were derived from the median importance score [5,6].

# Development of a Tool for Population Health Risk Stratification in Primary Care Through Consensus-



# Definition of Health Risk

Results

"The likelihood of a progressive decline in an individual's health status due to medical and/or psychosocial-welfare conditions that could lead to hospitalization or death within a year"

- A total of **31 clinical and social factors** identified and rated. Consensus achieved on all factors after 3 rounds of Delphi. • Highest-weighted factors: advanced age, excessive polypharmacy, cancer, cognitive impairment, and social-
- psychological distress.
- Other important factors: renal failure, stroke, heart failure, prior hospitalizations, and ER visits.

## PCPs

- Specialists
- Nurses
- Public Health Experts
- Pharmacist

Factor/item	Score	Importance
Age >90	9	
Age 80-89	9	
Polypharmacy (10+)	9	
Cancer in previous 3 years	9	
Dementia	9	
BMI >30	9	
Cognitive impairment	8	High
Chronic renal failure	8	
Stroke	8	
Heart failure	8	
Polypharmacy (5-9)	8	
Femur fracture	8	
Motor skills impairment	8	
Social-psychological distress	8	
Chronic respiratory failure	8	
Coronary artery disease	8	
Age 70-79	8	
Assisted home care	8	
BMI <18	8	
Chronic liver disease or cirrhosis	8	
Current smoker	8	
COPD	8	
Hospitalization(s)	8	
Type II Diabetes	7	
Schizophrenia	7	
BMI 25-30	7	
Depression	7	
Alcohol Abuse	7	
Inappropriate meds 65+ (NSAIDs)	7	
Type I Diabetes	6	Moderate
Age 60-69	6	
Urinary incontinence	6	
Connective tissue diseases	6	
Rheumatoid arthritis	6	
Former smoker	6	
Emergency Room	6	
Arterial hypertension	5	
Psoriasis	5	
Age 50-59	5	
Age < 50	2	Low

# Conclusion

- health risk stratification in primary care.
- implications for policy and practice.

**References & Contact Information** 



• The tool provides a **robust framework** for population • Future phases will validate the tool's predictive performance using patient-level PCP data and assess its



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