INTERMED-Self Assessment (IMSA): Validity and preliminary applications in research

Introduction
The INTERMED Self-Assessment questionnaire (IM-SA) was developed as an alternative to the INTERMED Complexity Assessment Grid interview (IM-CAG) to assess biopsychosocial complexity and health care needs in order to optimize care. The aim of this study was to discuss possible applications of IMSA to routine clinical work in a CL psychiatry setting, after presenting IM-SA's feasibility, reliability, validity and predictive value for health care utilization (HCU) and quality of life (QoL) as emerged by the IMSA Study.

Methods
The IMSA Study was an international multicentric prospective observational cohort study, involving 850 participants who completed both the IM-SA and IM-CAG. Feasibility by percentages of missing values, reliability by Cronbach's alpha, interrater agreement by intraclass correlation coefficients (ICCs) and convergent validity of IM-SA scores with mental health (SF-36 mental health subscale and HADS) and medical health (CIRS) and discriminant validity of IM-SA scores with QoL (EQ-5D) by Spearmans rank correlations were determined. Predictive validity of IM-SA scores with HCU and QoL was examined by (generalized) linear mixed models. At Modena University Hospital, IMSA was included in several clinical research protocols to support screening procedures.

Results
Feasibility, face validity and reliability (Cronbach's alpha 0.80) were satisfactory. ICC between IM-SA and IM-CAG total scores was .78 (95% CI .75–.81). Correlations of the IM-SA with the SF-36, HADS, CIRS and EQ-5D were -.65, .002, .28 and -.59 respectively. The IM-SA predicted HCU and QoL after 3- and 6-month follow-up. Seven subjects suffering from comorbid HIV and depression and 30 subjects undergoing colonoscopy for screening were also tested with IM-SA. Mean baseline score was 17.14 (SD = 8.71) for the depressed HIV subjects, with 2 subjects overcoming the cutoff of 21, suggesting clinical complexity. Mean score was 7.72 (SD = 4.19) for subjects undergoing colonoscopy, none of whom reached a score suggesting clinical complexity.

Conclusion
The IM-SA may efficiently support healthcare professionals in the assessment of patient's biopsychosocial complexity aimed at providing integrated, personalized multidisciplinary care. Inclusion of IM-SA as a routine screening tool may be advised in different clinical in- and out-patient contexts.