The Individual Care Plan (ICP): proposal of a model to improve the communication between hospital and primary health care services

Piano Assistenziale Individuale (PAI): proposta di un modello per migliorare la comunicazione tra Ospedale e Servizi di Cura Territoriali

L. Carulli, M.A. Becchi, L.M. Carozza*, G. Martucci*, F. Pignatti*
Dipartimento di Scienze Biomediche, Metaboliche e Neuroscienze, Università di Modena e Reggio Emilia; *Scuola di Specializzazione in Medicina di Comunità, Dipartimento di Scienze Biomediche, Metaboliche e Neuroscienze, Università di Modena e Reggio Emilia

**Introduction.** I pazienti ricoverati presso i reparti di Medicina sono spesso definiti complessi per la severità dei sintomi, le comorbilità, la non autonomia e le condizioni socioeconomiche. Al raggiungimento della stabilità clinica, tali pazienti possono essere dimessi dall’Ospedale; al fine di assicurare la continuità di cure è necessario che sia steso un piano personalizzato di cure e assistenza da trasmettere ai Servizi di Cura Primarie. Lo scopo di questo studio è di proporre un modello di Piano Assistenziale Individuale (PAI) per i pazienti complessi.

**Metodi.** Il modello è stato sviluppato partendo dalla rilevazione dei bisogni multidimensionali secondo le indicazioni dell’Organizzazione Mondiale Sanità (Classificazione Internazionale delle Funzioni, Disabilità e Salute), e definendo per ogni bisogno, l’obiettivo da raggiungere, i relativi interventi, le figure professionali coinvolte e le forniture necessarie (farmaci, presidi e ausili).

**Risultati.** Il modello è presentato in forma pratica indicando il PAI di un paziente. Il PAI, suddiviso in tre sezioni (clinica, assistenziale e ambientale) descrive in dettaglio tutti gli aspetti di cura e assistenza da erogare nei servizi territoriali.

**Conclusioni.** Il modello che noi proponiamo permette di assicurare una continuità di cure e di assistenza dopo la dimissione dall’Ospedale, di migliorare la comunicazione tra Ospedale e Servizi di Cura Primarie e tra i diversi Servizi in cui transita il paziente e infine di monitorare l’evoluzione nel tempo dei bisogni multidimensionali. Inoltre permette di monitorare i costi di assistenza e cura e gli outcome clinici di un paziente.

**Parole chiave:** Piano assistenziale individuale, Dimissione protetta, Servizi di cure primarie, Bisogni multidimensionali, Approccio bio-psico-sociale

**INTRODUCTION**

Patients admitted to Internal Medicine wards are frequently patients with severe symptoms, comorbidity, disabilities and critical socioeconomic conditions. These patients are defined complex patients. Although the complex patient concept comes mainly from the geriatric literature \(^1\) \(^2\), it may include also young or adult people with serious disabilities. Once the clinical stability is achieved, complex patients may be discharged from hospital, but the resolution of acute medical problems does neither remove social problems nor chronic illness and disabili-
ties and they require continuity of care in the primary health care services. A WHO report \(^3\) provides evidence on the arrangements needed to ensure an appropriate transfer of complex older patients between hospital and community services. We think that the same actions may be applied to complex patients of any age.

The aim of this study is to propose a model of Individual Care Plan (ICP) for complex patients, resulting from the assessment of multidimensional needs. The model intends to improve the discharge planning through the bio-psycho-social approach, facilitate the continuity of care and cure after hospital discharge, ensure the communication between hospital and primary services and monitor the evolution of multidimensional needs over the time.

**MATERIALS AND METHODS**

The process is based on four types of interventions: comprehensive patient assessment, discharge planning, discharge support and educational interventions.

A comprehensive patient assessment is a patient-centred multidimensional needs assessment, as the one provided by the International Classification of Functioning, Disability and Health (ICF) \(^4\). The ICF is a bio-psycho-social tool, providing a descriptive profile of needs related to the diseases and to the environment in which the patient lives. The ICF is complementary to the International Classification of Diseases and related health problems (ICD-10) \(^5\). Using e ICD-10 and ICF together provides a more meaningful and complete picture of a patient’s health. Furthermore the ICF provides “qualifiers” to record evenly the extent of functions and body structures impairments, activity limitations, environmental barriers and facilitators according to an homogeneous scale. The application of ICF is well documented in clinical practice \(^6\) \(^7\).

The discharge planning is the process for hospitalized patients starting when the clinical stability is achieved. It includes patient and family’s needs assessment and the development of a patient-specific discharge plan, defining services and arrangements to assure the continuity of care. These interventions, provided by a multidisciplinary team belonging to hospital or primary care services, are coordinated by an health professional (physician or specialist nurse) working according to a defined protocol of care. The discharge plan allows the communication between hospital and community services. Some studies provide information about the “data set” of discharge documents \(^8\) \(^9\).

The discharge supports are the activities and devices designed to support the complex patients at home or nursing home after the hospital discharge. The arrangements concern both a wide range of curative, rehabilitative and assistance activities provided by primary care professionals, and drugs and devices supplied for routine cure and care. The organization of discharge supports is provided by a primary care coordinator.

Educational interventions are the information and the active education intended to improve the patient and caregiver abilities to manage aspects of care after discharge. Interventions may be provided by hospital professionals in the hospital setting before the discharge \(^10\), or by primary care professionals at home or nursing home \(^11\). When a complex patient is discharged and goes home, the hospital physician asks the family collaboration at home. The caregiver education allows the developing of a “caregiver-oriented discharge plan” \(^12\).

The model was developed taking into account the information provided by the Italian Decree “DPCM February 14, 2001” \(^10\) and the recommendations of qualified international reports \(^13\) \(^15\). We present the model in a practical manner, indicating the ICP of a complex patient.

**RESULTS**

The ICP model was set up on complex patients of the Internal Medicine ward of the new S. Agostino-Estense Hospital in Modena (Italy). The Internal Medicine ward is also the setting for the residency training of Internal Medicine and Community Medicine Specializations. Both Specializations have educational programs including the competence achievement on “assisted hospital discharges” and “discharge planning”.

The ICP reported in this paper was planned for the complex patient described in Box 1. When the B.E. clinical stability was achieved, the multidisciplinary team of the ward, including the internist physician, the residents physicians and the head nurse, informed the patient and the family of the upcoming discharge and shared with them the post-discharge primary health care service. Home health care was the choice
for both the patient and family and since this choice was considered appropriate also by the ward team, the discharge planning was carried out. The discharge process includes four steps. The first step was the assessment of the multidimensional needs of patient using the ICF Checklist including the impairments of body functions and body structures, the activity limitations and participation restrictions and the barriers in the patient living environment. The environmental aspects of the ICF Checklist were modified to include following categories: a) family, personal care providers and relationships (family composition, caregivers, family behaviours); b) house (characteristics of the house of living); c) economic status (economic self-sufficiency); d) services, products, technology, financial contribution.

The second step of the process was the ICP drawing up. This paper presents a structured format of ICP developed taking into account also the recommendations of qualified international reports. According to the three components of the ICF classification, the ICP was subdivided into three sections: Clinical, Care, and Environmental.

The Clinical section (Tab. I) refers to the diseases affecting patient (ICD-10 classification) and the impairments of body functions and body structures (ICF classification) connected to each disease. The Care section (Tab. II) refers to the activity limitations and participation restrictions (ICF classification). The hospital team quantified the detected limitation by the Barthel Index and by the IADL Index. The Environmental section (Tab. III) refers to the environmental factors and reported situation. All sections shared the following points: a) the desired goals for the appropriate cure and care of the patients at home; b) the intervention and the responsibility of the primary health care team; and c) the prescriptions (drugs and other medical products and devices for personal use) designed to support the patient at home. The ICP was annexed to the discharge summary and addressed to the B.E. general practitioner.

The third step was the direct communication to the access-point of the primary care services in order to organise the continuity of care at home. According to the defined protocol for patient discharge to home based on the ICP, the head nurse of the Internal Medicine ward gives all the information and the necessary arrangements to the professionals and the coordinator nurse of the home care service, in order to ensure continuity of care. It must be stressed that

---

**Box 1. Case Report**

| Patient clinical history | B.E. was a 68 years old woman admitted to the Internal Medicine ward after an access to the Day Service for evacuative paracentesis with drainage of 6000 ml of clear yellow ascitic fluid. She was affected by: HCV-related liver cirrhosis with portal vein thrombosis and secondary esophageal varices, cryoglobulinemia, membranoproliferative glomerulonephritis and chronic renal insufficiency; Metabolic syndrome (obesity, hypertension in treatment, type 2 diabetes mellitus and dyslipidemia in treatment), Hypertensive cardiopathy with chronic atrial fibrillation in treatment; Iatrogenic osteoporosis; Hypothyroidism in treatment; Cervical arthrosis; Difficulties in mobility. The anamnestic data showed a recent hospitalization in the same Operative Unite for “Encephalopathy following self-administration of benzodiazepine” |
| Physical Examination at the admission to the ward | B.E. was conscious, oriented, compliant and afebrile. She presented arrhythmia, normal breath sounds, abdomen protuberant and tender with ascites and normal bowel sounds. Purpura and pitting edema were present at lower limbs. |
| Laboratory tests | The tests showed anemia, thrombocytopenia, iperbilirubinemia, hypoalbuminemia, dyslipidemia, good glycemic control |
| Instrumental investigations | The blood pressure measurement showed a moderate hypertension. The abdominal ultrasonography showed chronic hepatopathy, splenomegaly and ascites. The endoscopic examination, necessary for progressive anemia, showed the presence of stage F2 esophageal varices without red marks and erosive gastritis. Afterwards a blood transfusions was administered. The transthoracic echocardiography showed a moderate hypertrophic cardiomyopathy |
| Diagnosis at discharge | After 7 days of hospitalization the patient was discharged with diagnosis of “Cirrhosis of mixed etiology (HCV-related and metabolic) in B9 Child-Pugh class, complicated by ascites, esophageal stage F2 varices and erosive gastritis. Anemia. Metabolic syndrome and permanent Atrial Fibrillation” |
| Continuity of care after hospital discharge | The presence of polypathology and no autonomy, suggested a discharge planning providing home interventions by general practitioner, nurse and physiotherapist. |
the goals proposed by the hospital team in the three sections of ICP must be shared by the primary health care team and/or reassessed once the patient is at home. The achievement of the goals must be periodically verified by the home health care team. The fourth step is the patient and caregiver education by the hospital team and by the prima-

### Table I. The Personal Care Plan of B.E. The Clinical Section.

<table>
<thead>
<tr>
<th>Diseases (ICD-10 classification), related functional and structural impairments (ICF classification) and severity</th>
<th>Desired Goals</th>
<th>Interventions (Responsibility)</th>
<th>Prescriptions (drugs and other medical products for personal use)</th>
</tr>
</thead>
</table>
| Cirrhosis HCV-related (Child B9, ICD10 = B18.2)  
- Portal vein thrombosis with secondary esophageal varices (F2 stage) and congestive gastropathy  
- Cryoglobulinemia complicated by vasculitis purpura on the lower limbs, type 2 membranoproliferative glomerulonephritis and chronic renal insufficiency (creatinine 2mg/dl) and arthralgia  
- Anemia (Hb 10.4 g/dl)  
- Coagulation deficit (INR = 1.9) | Clinical mangement of:  
- varices bleeding  
- cyrosis-stage progression and hepatic failure  
- renal failure  
- anemia  
- impaired synthesis of clotting factors |  
- Blood draws at home every 3 months *(home nurse)* for monitoring haemochrome, bilirubin, albumin, INR, ammonium, cryoglobulins, indices of liver and kidney function, and inflammatory markers;  
- GP evaluation of laboratory reports  
- Abdominal ultrasonography in DH every 6 months *(internal medicine doctor)*  
- Upper gastro intestinal endoscopy in DH at least once every year *(gastroenterologist)*  
- Drugs administration *(caregiver)* |  
- Furosemide 25mg *(3tab/die)*  
- Propranolol 40mg *(1/4tab + 1/4 tab die)*  
- Prednisone 5mg *(1 tab/die)*  
- Intestinal cleaning  
- Hepatopatyc and nephropatyc diet |
| Type 2 Diabetes Mellitus (ICD10 = E11)  
- Hyperglycemia: fasting blood glucose 140 mg/dl, glycated hemoglobin 5,6%  
- Diabetic polyneuropaty | Clinical mangement of:  
- glycemic failure  
- Neuropatic chronic pain |  
- Daily monitoring the blood glucose levels *(caregiver)*; GP evaluation of reports  
- Periodic blood draws at home *(home nurse)* for glycated hemoglobin and blood test in the Antidiabetic center  
- Periodic DH visits in the Antidiabetic Centre to monitor the complications of diabetes and prescribe therapy *(endocrinologist)*  
- Drugs administration *(caregiver)* |  
- Diabetic diet  
- Insulin therapy *(Insulin Humalog 24 UI/die, Insulin lantus 20 UI)* |
| Obesity (ICD10 = E66.0)  
- Body Mass Index: 43  
- Dyspnea on daily living efforts  
- Walking difficulty | Clinical mangement of obesity |  
- Periodic DH visits in the Obesity Centre to keep control of weight, eating behaviour and physical therapy *(endocrinologist)*  
- Administration of food according the diet *(caregiver)* |  
- Hypocaloric diet |
| Dyslipidemia (ICD10 =E272)  
- Total cholesterol 180mg/dl; HDL 30mg/dl  
- Triglycerides: 170mg/dl | Clinical mangement of dyslipidemia |  
- Periodic blood draws at home *(home nurse)* for blood lipids |  
- Low-fat diet |
| Hypertension (ICD10=I10)  
- Blood pressure: 150/80 mmHg  
- Hypertensive Cardiopathy with Chronic Atrial Fibrillation | Clinical mangement of blood pressure |  
- Daily blood pressure monitoring *(caregiver)*; GP evaluation of reports  
- Cardiac ultrasonography in DH Cardiological Centre at least once every year *(cardiologist)* |  
- Furosemide *(Lasix 25mg)*  
- Cardiopatyc diet |
| Hypothyroidism (CD10 = E03.9) | Clinical mangement of hypothyroidism | Blood draws at home every 6 months *(home nurse)* for monitoring TSH; GP evaluation of laboratory reports |  
- Levothyroxine 50mcg *(1tab/die)* |
| Cervical Arthrosis (ICD10 = M19.9)  
- L1 vertebral collapse and neck pain | Clinical mangement of:  
- Chronic pain  
- Vertebral collapse |  
- Drugs administration *(caregiver)*  
- Vertebroplasty treatment with hospitalization *(surgery specialist)* |  
- Antalgic therapy |
### Tab. II. The Personal Care Plan of B.E. The Care Section.

<table>
<thead>
<tr>
<th>Activity limitations and severity</th>
<th>Desired Goals</th>
<th>Interventions</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobility</strong> (Barthel mobility Index: 20/40) (17)</td>
<td>Providing Intensive help</td>
<td>Constant presence of a person to help for mobility activities (paid carer)</td>
<td>Devices according to the physiotherapist prescription</td>
</tr>
<tr>
<td>Severe difficulty in walking, using transportation, moving around using a wheelchair, driving</td>
<td>Enancement of physical residual functional capacity</td>
<td>Physical exercises and functional rehabilitation (home physiotherapist, caregiver)</td>
<td></td>
</tr>
<tr>
<td><strong>Self care</strong> (Barthel ADL Index: 40/60) (17)</td>
<td>Providing limited help</td>
<td>Presence of a person to help for mobility activities (paid carer)</td>
<td></td>
</tr>
<tr>
<td>Moderate difficulty in washing oneself, caring for body parts, toileting, dressing, eating, drinking, looking after one’s health</td>
<td>Enhancement of physical residual functional capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Domestic life</strong> (IADL index: 3/8) (18)</td>
<td>Providing complete help</td>
<td>Constant presence of a person to help for mobility activities (paid carer)</td>
<td>Devices according to the physiotherapist prescription</td>
</tr>
<tr>
<td>Severe difficulty in acquisition of goods and services, preparation of meals, Severe difficulty in doing housework</td>
<td>Enancement of physical residual functional capacity</td>
<td>Physical exercises and functional rehabilitation (home physiotherapist, caregiver)</td>
<td></td>
</tr>
<tr>
<td><strong>Interpersonal interactions and relationships</strong></td>
<td>Enhancement of interpersonal interaction</td>
<td>Psychological support (psychologist)</td>
<td></td>
</tr>
<tr>
<td>Moderate difficulty in formal relationships, social relations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community, social and civic life</strong></td>
<td>Empowerment of social life</td>
<td>Inclusion into Day Care Centres</td>
<td></td>
</tr>
<tr>
<td>Severe difficulty in recreation and leisure</td>
<td></td>
<td>(home care team coordinator)</td>
<td></td>
</tr>
</tbody>
</table>

### Tab. III. The Personal Care Plan of B.E. The Environmental Section

<table>
<thead>
<tr>
<th>Environmental categories and reported situation</th>
<th>Desired Goals</th>
<th>Interventions</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family, personal care providers and relationships</strong></td>
<td>Overcome family barriers:</td>
<td>Providing therapeutic education to the primary Caregiver (GP and home nurse)</td>
<td>“Therapeutic education card” about drug administration, early detection of signs and symptoms of acute exacerbation of diseases</td>
</tr>
<tr>
<td>B.E is married and lives with her husband; she has two daughters 40 and 42 years old, living in different apartments in the same house</td>
<td>Improve the skills of the primary caregiver for self-care</td>
<td>Providing a domestic helper (home care team coordinator)</td>
<td></td>
</tr>
<tr>
<td>B.E. primary Caregiver is her husband: he provides help in daily activity and mobility. The Caregiver complains a high burden</td>
<td>Provide help to the primary caregiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.E. partial Caregivers are the two daughters: they provide help occasionally</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family relationships are declared good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>House</strong></td>
<td>Overcome architectural barriers (stairs)</td>
<td>Providing information about the stair-lifts installation (home care team coordinator)</td>
<td>Information cards about commercially stair-lifts</td>
</tr>
<tr>
<td>B.E. lives in a property home, on a 3rd without lift</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economic status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both the patient and her husband have old age pensions. The family income is sufficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Services, products and technology, financial contributions</strong></td>
<td>Overcome the services and devices barriers:</td>
<td>The ward head nurse must notify the Home Care Service for providing:</td>
<td></td>
</tr>
<tr>
<td>Currently no home care, home devices and economic benefits are enabled</td>
<td>Planning the home health care service and the acquisition of financial contribution</td>
<td>• the home health care team (GP and home nurse)</td>
<td>• Forms to submit the demand for financial contributions</td>
</tr>
<tr>
<td>Currently the follow-ups in Internal Medicine DH, Nephrology DH, Diabetes DH are carried out with detailed programs</td>
<td></td>
<td>• Providing a wheelchair for patient indoor and outdoor transportation</td>
<td>• Calendar for patient follow-up in the Internal Medicine DH</td>
</tr>
</tbody>
</table>
Discourse

This paper focuses the attention on two actions required to ensure the continuity of care to a complex patient at the hospital discharge: the assessment of the multidimensional needs and the development of the Individual Care Plan (ICP). The scientific literature on multidimensional assessment of complex patients refers to functional, cognitive, affective, social, financial, environmental status, measuring all aspects with different instruments and inhomogeneous quantifying scales. The literature is very rich on the use of ICF to identify impairments, activities and environmental factors of the most common diseases so to define the “ICF core set” for specific diseases. Concerning the ICP, we developed a model based on the recommendations provided by the Italian decree for patients requiring health and social benefits. The decree states that the provision of facilities is the result of the multidimensional assessment of needs and the definition of an integrated and personalized care plan. We also took into account the aspects suggested by a WHO working group set up to define a structured multi-professional approach to the patient in the rehabilitation area (the rehabilitation cycle). The Authors provided a framework based on the following steps: identification of the problems and needs of the patient, determination of the intervention program and the cycle goals, assignment of intervention targets to health professionals and define intervention techniques, evaluation of the goal achievement. The European literature refers on the use of ICP for both clinical and management purposes. In Norway, the ICP defines goals, tasks, program of care and the providers and is used for the management of care allowing the complex patients to shape services to one’s own needs. In Sweden an ICP model (VIPS) was promoted since the 90’ as a nursing instrument including nursing diagnosis, interventions and outcomes. In United Kingdom, which has a long-standing culture of the personalization of care, the ICP is a clinical tool and the national NICE clinical guidelines provide this instrument for many diseases. For example, type I diabetes guidelines state that “an individual care plan should be set up and reviewed annually, modified according to changes in wishes, circumstances and medical findings, and the details must be recorded”. Likewise the national alcoholism guidelines provide information about “a comprehensive assessment of needs and the development of an individualized care plan in collaboration with families, a coordination of the care plan in order to deliver an integrated care pathway, monitoring the impact of interventions and revising the care plan when necessary”. Concerning the palliative care context, the NICE guidelines suggest to draw up an ICP as a result of multidimensional need assessment and with the aim to show physical, psychological, social and spiritual support. The personalization of care is the current frontier of research in the more advanced health systems. In Netherlands a study about patients affected by dementia (the COMPASS study) is in progress, with the intent to compare the traditional model of care managed by general practitioners with innovative models providing ICP and case managers.

In Italy the only official statement of PAI is the DPCM February 14, 2001. The decree leaves to the regional health Authority the decision of how and by which means to apply the stated principles. Nowadays few Regions has produced official documents about ICP. As an example in the Lombardy Region, the Local Health Authority of Milan suggested an ICP model divided into four areas: clinical, nursing, rehabilitation, and social areas, drew up respectively by the physician, the nurse, the physiotherapist, and the social worker. The Piedmont Region spoke about the ICP as the result of the work on elderly patients of a multidisciplinary team (the Geriatric Assessment Unit), in partnership with the GP.

Delivering care through ICP is the only strategy to realize the person-centered approach and the ICP is a good tool to realize this approach. The person-centered approach is much emphasized by the Academic Internal Medicine and the ICP may become a valuable tool for this intent because is focused on the needs of patients and oriented to ensure the continuity of care after the hospital discharge. Moreover we recommend the ICP for the training programs of...
the resident physicians. A previous study performed in the same ward of Internal Medicine, suggested the importance of Academic education about the management of complex patients at the hospital discharge. This paper gives continuity to that study, providing a tool to further investigate the complex patients, both for care and for student education.

CONCLUSIONS

As a conclusion we want to focus the attention on SWOT points (Strengths, Weaknesses, Opportunities, Threats) coming from the multidimensional needs assessment and Individual Care Plan drawing up.

Strengths. The first point is the identification of the best primary care facility in order to guarantee the continuity of care. Secondly the ICP allows the monitoring of the multidimensional needs over the time and in the different settings of care in which the patient transits. Thirdly ICP evaluates costs, results and outcome of care and cure of a patient.

Weaknesses. A first point is that the drafting of ICP requires efforts of more professionals working together for common objectives patient-centred. The team working requires a cultural change of professionals but despite that many regional and national Italian legislations recommending this change, the team work is difficult to achieve. A second point is that the multidimensional needs assessment and the draft of the ICP requires competencies and time, often lacking in actual hospital professionals. A third point concerns the difficulty to draw ICP by the ward team when the family is uncertain about their collaboration at home or require particular home arrangements depending on the decision of the primary care unit. Finally a fourth point needs to be addressed, and it concerns the actual lack of training in therapeutic education of patients and families both for hospital and primary care professionals. The WHO considers the therapeutic education as an integral and continuous part of care, but health care professionals lack the skills to provide patient with self-care education.

Opportunities. A first opportunity comes from the aging of the Italian population and the inconstant increase of multidimensional health needs and is inconceivable that clinical practice continues to detect only the clinical needs, resulting in a fragmented vision of the patient. A second opportunity comes from the current national and regional health laws of our country stressing the need for integrated and continue interventions to complex patients. These interventions must be documented with paper or computerized systems, following the patient in the network services. A third opportunity comes from the necessary revision in our country of the existing regulation governing the financial contribution (care allowance) for families collaborating with the home care team. The ICP-caregiver oriented provides visibility of the family cooperation and can be proposed as a requirement for the allocation of economic resources.

Threats. A first threat may arise from the possible lack of consideration of the ICP drafted by the hospital team by the primary care teams. Thus, for a coordinate planning the access of the primary care team to the hospitals required, even if it means a delay in the patient discharge. A second threat concern the lack of attention to the scientific literature attended by the general practitioner and others health and social professionals of the primary care services. Typically these professionals use methods and instruments accepted from the Local Health Agencies and the risk is that the ICP model remains unknown.

The SWOT analysis is useful to define the necessary actions needed to implement the biopsychosocial approach to complex patients and to give a comprehensive and integrate response to their multidimensional health needs. All these actions are centred on professional education and training in order to provide innovative knowledge and skills and to bring professionals to use the most appropriate tools for a patient-centred care.

ABBREVIATIONS

ICP: Individual Care Plan
ICF: International Classification of Functioning, Disability and Health
WHO: World Health Organization
ICD-10: International Classification of Diseases-10
Background. Patients admitted to Internal Medicine wards are frequently defined complex patients for their severe symptoms, comorbidity, disabilities and socioeconomic critical conditions. Once the clinical stability is achieved, they may be discharged from hospital and to ensure continuity of care they require personalized arrangements providing medical, nursing and social supports in primary health care services. The aim of this study is to propose a model of Individual Care Plan (ICP) for complex patients.

Methods. The model was developed starting from the assessment of multidimensional needs according to the International Classification of Functioning, Disability and Health (ICF) of World Health Organization (WHO), and defining for each detected need the goals, the related interventions, the professional involved and the devices prescribed for personal use.

Results. This paper presents the model in a practical manner, indicating the ICP of a complex patient. The ICP, divided into three sections (clinical, care and environmental) describes all the aspects of cure and care to be delivered in the primary health care services.

Conclusions. The ICP that we proposed is a dynamic tool aimed to ensure the continuity of care and cure after hospital discharge, to facilitate the communication between hospital and primary health services and in the different settings of care in which the patient transits, to monitor the evolution of multidimensional needs over the time. Finally the ICP is useful in evaluating the costs, results and outcome of care and cure of a patient.

Key words: Individual care plan, Assisted hospital discharge, Primary health care services, Multidimensional needs, Bio-psycho-social approach

References

3. Parker SG. Do current discharge arrangements from inpatient hospital care for the elderly reduce readmission rates, the length of inpatient stay or mortality, or improve health status? WHO Regional Office for Europe, Copenhagen 2005.
Notes

1. The severity of diseases and impairment refers to own specific scales (when they are available). ICF provides homogeneous qualifiers scales (mild, moderate, severe, complete problem) to which relate the values observed.
2. Goals relate to the areas: clinical management (prevention, cure, palliation, rehabilitation), family self-care participation, counselling and psychological support.
3. The severity of activity limitation refers to own specific scales. ICF provides homogeneous qualifiers scales (mild, moderate, severe, complete problem) to which relate the values observed.
4. Goals should be related to: the development of residual abilities; to provide limited, intensive, complete help.
5. The ICF Checklist provides the following list of categories: products and technology; natural environment; supports and relationship; attitudes; services, systems and policies.