Patient education – the words

**Communication:** It can be seen as a process by which messages are exchanged between individuals through a common system of symbols or behaviors. The message may be a question, a thought or feeling. The process is successful when the message is transmitted, received and understood effectively. (Anderson 1990).

**Information:** to update, provide news, to give or impart knowledge of a fact or circumstance

**Education:** Education is a more complex practice that involves a diagnosis, the choice of learning objectives and the application of teaching techniques and relevant assessment to enable the patients to: know their disease, competently manage therapy, prevent avoidable complications.
World Health Organization.

Therapeutic Patient Education

Continuing Education Programmes for Health Care Providers in the Field of Prevention of Chronic Diseases

Report of a WHO Working Group
Therapeutic Patient Education (TPE)

enables people with chronic diseases to manage their illness and yields benefits in both health and financial terms.

Many health care providers, however, lack the skills to provide their patients with such an education.
The Regional Office therefore convened a working group to prepare a document specifying the content of programmes for teaching health care providers to provide TPE. The **Working Group** comprised doctors, nurses, other health care providers and educators from countries throughout the European Region.
to prepare a document indicating the content of a specific education* programme for health care providers ... in the field of prevention of Chronic diseases* and therapeutic patient education*. Its aim is:

to **help health care providers** acquire the competencies to help patients to self-manage their chronic disease.
The WHO European Region has almost five million nurses. They constitute the largest health care provider group. Their actual and potential contribution to the management of chronic disease is under-acknowledged and under-used.
The status of therapeutic patient education in the treatment of chronic diseases

In health care practice outside the hospital, about 80% of the diseases treated are chronic.

Many patients do not comply with instructions; fewer than 50% follow their treatment correctly.

It has been observed that patients are inadequately informed about their condition and that few have been helped to manage or take responsibility for their treatment.
The status of therapeutic patient education in the treatment of chronic diseases

Though most physicians are highly competent in diagnosis and treatment, too few educate their patients to manage their condition.

There may be several reasons for failing to educate patients, such as too little time or lack of awareness of the need to do so.

One reason is that the initial training of most health care, especially medical-care, providers is based principally on diagnosis and selection of a therapeutic regimen.
The status of TPE in the treatment of chronic diseases

Though acutely ill patients may benefit from therapeutic patient education, it appears to be an essential part of treatment of long-term diseases and conditions, such as those listed below:

**Allergies**

**Cancers (and sequelae)**
Cancer (all sites)

Stomas (laryngotomy, gastroenterostomy)

**Blood  Haemophilia  Thalassaemias**

**Circulatory system**
Arterial hypertensive disease Cardiac insufficiency Cerebrovascular disease (stroke)
Claudication
Ischaemic heart disease, angina
Rheumatic heart disease
The status of TPE in the treatment of chronic diseases

**Digestive system**
- Cirrhosis
- Colitis
- Crohn’s disease
- Gastroduodenal ulcer
- Malabsorption

**Endocrine, nutritional and metabolic disorders**
- Addison’s disease
- Diabetes mellitus
- Obesity
- Thyroid gland dysfunction

**Infections**
- HIV/AIDS
- Poliomyelitis (sequelae)
- Tuberculosis

**Mental and behavioural disorders**
- Alcohol, drugs, tobacco and other substance abuse
- Alzheimer’s disease and Dementia
- Depression

**Musculoskeletal system and connective tissues**
- Arthritis and allied conditions
- Fibromyalgia
- Limb amputation, fractures, burns
- Neck and back disorders
- Osteoarthritis
- Osteoporosis
- Rheumatoid arthritis

The status of TPE in the treatment of chronic diseases

Nervous system
Epilepsy
Hearing loss, deafness
Multiple sclerosis
Paraplegia, tetraplegia and other traumatic brain injuries
Parkinson’s disease
Visual disability, blindness

Respiratory system
Bronchial asthma
Chronic obstructive pulmonary disease
Cystic fibrosis
Different **types of TPE** have been introduced in various health care settings but they have often been arbitrarily designed and poorly taught.

There is an **obvious need** for better-quality educational programmes with a therapeutic intent.

Often patients begin to cope with their disease on their own, but health care providers should use therapeutic patient education to make their patients’ efforts more productive.
The concept of TPE

Health care providers tend to talk to patients about their disease rather than train them in the daily management of their condition.

TPE is designed therefore to train patients in the skills of self-managing or adapting treatment to their particular chronic disease, and in coping processes and skills.

It should also contribute to reducing the cost of long-term care to patients and to society.
Educational programmes should be tailored to the different types of health care provider engaged to various degrees in the care of patients with chronic diseases.

These are mainly physicians, nurses, dieticians, pharmacists, physiotherapists, ergotherapists, psychiatrists/psychologists, social workers, occupational health specialists, and chiropodists.

Other professional categories should be informed about and take part in therapeutic patient education. They include specialists in education, health insurance specialists, hospital administrators, school health educators and others.
A clinical and managerial challenge
Self-management and patients’ empowerment generally are an integral part of the treatment for patients with chronic diseases.

Self-management promotion is often a task of multi-professional teams, operating within DMPs (Digital Media Project) or integrated model of care, which are demanded to give patients and their families the right instruments to manage the disease.
The spreading of chronic conditions among the population and the evolutions in management of chronic diseases have had impacts on the skills and the organization of the work of healthcare professionals.

In particular, the increasing importance of primary care has been requiring nurses to take off some tasks and responsibilities previously reserved to doctors and physicians.
Joint Commission International (JCI) identifies, measures, and shares best practices in quality and patient safety with the world.

JCI provide leadership and innovative solutions to help health care organizations across all settings improve performance and outcomes.

Their expert team works with hospitals and other health care organizations, health systems, government ministries, public health agencies, academic institutions, and businesses to achieve peak performance in patient care.
Effective Communication, Cultural competence, Patient/Family centred care

“Continuum of care”

• Admission
• Assessment
• Treatment
• End-of-Life Care
• Discharge and Transfer
• Organization Readiness
A hospital must embed effective communication, cultural competence, and patient- and family-centered care practices into the core activities of its system of care delivery—not considering them stand-alone initiatives—to truly meet the needs of the patients, families, and communities served.

The recommendations in the Roadmap for Hospitals do not encompass every aspect of these three areas, but they do represent key issues that hospitals should consider to meet the unique needs of each patient.
Patient and Family Education (PFE)
Standard PFE.1

The hospital provides education that supports patient and family participation in care decisions and care processes.

Intent of PFE.1

Hospitals educate patients and families so that they have the knowledge and skills to participate in the patient care processes and care decisions. Each hospital builds education into care processes based on its mission, services provided, and patient population. Education is planned to ensure that every patient is offered the education he or she requires. The hospital chooses how it organizes its educational resources in an efficient and effective manner. Thus, the hospital may choose to appoint an education coordinator or education committee, create an education service, or simply work with all staff to provide education in a coordinated manner.
Objective

To know - Share – Acquire
Appropriate skills

Back home

Self- confidence    Self- management

Satisfying social life

Educational Recorder
PubMed
Limits: Humans, Meta-Analysis, Review, English, Cancer, Systematic Reviews, All Child: 0-18 years
Key words: Therapeutic patient education, education, empowerment, self care, oncology service, hospital, outpatient, blood marrow transplantation, bone marrow transplantation.

Journals, Websites
www.etp-journal.org
“Patient Education and Counseling Journal
www.journals.elsevierhealth.com/periodicals/pec

Annual Congresses
TPE
EBMT
Therapeutic patient education

It is an activity aimed at helping the patient and his family to

- **Understand** the nature of the disease and treatments
- **Collaborate** actively throughout the course of treatment
- **Take care** of their health

To maintain and improve their **quality of life**

TPE must be managed by health workers

- **Trained to instruct** the patient and/or his/her family members
to manage their disease and thus
to prevent avoidable complications

TPE is a complex practice that involves:

- Educational diagnosis
- Learning objectives
- Techniques for teaching and assessment

To allow the patients to:

- Know their illness;
- Manage competently their therapy and lives (self-management);
- Prevent avoidable complications

"educational continuum" divided into three phases:

- **Initial Education**
- **Educational Follow-up**
- **Educational resumption**
Educational Record

- Educational diagnosis
- Educational contract
- Assessment of skills to be acquired methods and techniques to be adopted
- Evaluation of results
# Existing Material

## Educational Form

### Unità Operativa

**SOGLIA PER LA RILEVAZIONE DEL PROGRAMMA EDUCATIVO**

<table>
<thead>
<tr>
<th>Cognome</th>
<th>Nome</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Data del ricovero</th>
<th>1° Ricovero</th>
<th>Follow-up</th>
</tr>
</thead>
</table>

**Eventuali barriere all'apprendimento**

<table>
<thead>
<tr>
<th>NO</th>
<th>SI Specificare codice</th>
</tr>
</thead>
</table>

**Destinatari del programma**

- **Paziente**
- **Genitori**
- **Altro (specificare)**

### Informazioni fornite

<table>
<thead>
<tr>
<th>Malattia di base, condizioni di salute</th>
<th>Metodo insegnamento</th>
<th>Codice di valutazione</th>
</tr>
</thead>
</table>

**Prevenzione delle infezioni e norme di profilassi igienico-comportamentali**

**Gestione del dolore**

**Codice barriere all'apprendimento**

<table>
<thead>
<tr>
<th>1. limiti cognitivi</th>
<th>Modo di insegnamento</th>
<th>Codici di valutazione</th>
</tr>
</thead>
</table>

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**Key Issues**

- Eligibility of patients
- Direct Admission in HSCT
- No foreign pts
- Nursing management only
- Only allogeneic HSCT

**Guide for completing the form**

- No opportunities for sharing the project with the staff
- No training or specific information
Proposal of a new Record

Cartella educativa
Primo colloquio e prima raccolta dati
Dati anagrafici

Cognome  Nome
Data di Nascita  Indirizzo
Città  Nazione

Stato attuale

Residente
Necessità di abitazione si no
Necessità aiuto assistenza sociale si no

Condizione scolastica (attuale o precedente)
Progetti per il futuro
Cambiamenti scolastici professionali

Modalità di apprendimento preferita
Abitudini di vita e dei genitori
Sport/Hobby personali

Rete relazionale (famiglia, amici,)

Aspirazioni affettive

Atteggiamenti del paziente durante primo incontro

Avuta educazione sanitaria specifica precedente (approfondimento con le schede specifiche)
Rapporto con lamalità

Cosa pensa del Trapianto

Autonomia nella medicazione (se presente) si no
o assunzione farmaci si no

Si presenta: tranquillo __ collaborante __ ansioso __, angosciato __, preoccupato __, arrabbiato __.

Passivo – rassegnazione:

Attivo – dinamismo:

Autonomia – dipendenza rispetto agli accompagnatori:

Complettamente autonomo  1  2  3  4  5  6 completamente dipendente

LEGENDA

 Metodo di valutazione:

- Compreensione verbale
  - Domande是非
  - Carte di Barrow
  - Abilità motoria
- Altre (spiegare)
- questionario

Livello di apprendimento:

- Raggiunto
  - Parzialmente raggiunto
  - Non raggiunto

Codice compilatore:
1. Medico
2. Infermiere
3. Psicologo
4. Fisioterapeuta
5. 

Ambito/obiettivo educativo:

Destinazione:

Codice barriers all'apprendimento:
1. Limiti cognitivi
2. Barriere emotive
3. Barriere linguistiche
4. Condizioni fisiche
5. Problemi sociali
6. Problemi uditive
7. Barriere religiose, culturali etiche
Educational Process

- Interviews / information material
- Competence check forms
  - HSCT process
  - hygiene
  - preventing infections
  - nutrition / hydration
  - Elimination
  - Vital signs
  - Therapy
  - Central venous Catheter (CVC)
  - Mobilization or other
- skills required at discharge
- Educational Follow up
### Scheda 8: rilevazione conoscenza CVC

<table>
<thead>
<tr>
<th>Compilatore</th>
<th>Metodo valutazione</th>
<th>acquisito</th>
<th>Livello Apprendimento</th>
<th>Competenza</th>
<th>Ambito Modalità Intervento</th>
<th>Destinatari</th>
<th>Prossima valutazione</th>
<th>Barriere e considerazioni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necessita CVC</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Intellettuale</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Quale CVC</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Differenze anche per età e condizioni</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Per quanto tempo</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Applicazione permanenza e rimozione</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Lavaggio mani</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Procedura per gestione CVC</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Medicazione sapere</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Procedura medicazione</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Medicazione simulazione</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Procedura medicazione</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Medicazione esecuzione</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Procedura medicazione</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Medicazione Socialità</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Sicurezza CVC</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Riconoscimento infezioni</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Valutazione medicazione</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
<tr>
<td>Riconoscimento fuoriuscita</td>
<td>Codice__ Firma___</td>
<td>Data ___ ___</td>
<td>___ ___ ___ ___</td>
<td>Sicurezza CVC</td>
<td>___ ___ ___ ___ ___</td>
<td>___ ___ ___</td>
<td>firma___</td>
<td>___ ___ ___ ___ ___</td>
</tr>
</tbody>
</table>
Four groups

In our team 4 groups are working on:
- CVC Management
- Oral therapy at home
- Hygienic care
- Diet

New educational forms have been proposed
And now we are trying them

The whole process must be

Written  Registered
# Oral Therapy at home

## 36

### DIPARTIMENTO DI EMATOLOGIA ED ONCOLOGIA PEDIATRICA

**TRASPLANT DI CELLULE STAMINALI EMOPOTETICHE**

**Scheda di valutazione per la terapia orale a domicilio**

- **Le sono stati donati i farmaci che il paziente dovrebbe assumere a casa?**
  - Sì [ ] No [ ]

- **Dose e somministrazione del farmaco**
  - [ ] Biennale
  - [ ] Settimanale
  - [ ] Giornaliero

- **Confezione**
  - [ ] Non applicabile

- **Indicazione**
  - [ ] Non applicabile

- **Dosaggio**
  - [ ] Non applicabile

- **Spazio per note**

**Dimensione pratica dosaggio somministrazione. Ha capito tutti i passaggi?**

- [ ] No
- [ ] Sì

**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

- [ ] No
- [ ] Sì

**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

- [ ] No
- [ ] Sì

**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

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**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

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**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

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- [ ] Sì

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- [ ] No
- [ ] Sì

**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

- [ ] No
- [ ] Sì

**Selezione dettagliato dosaggio somministrazione. Ha capito tutti i passaggi?**

- [ ] No
- [ ] Sì
Oral Therapy at home

**DIPARTIMENTO DI EMATOLOGIA ED ONCOLOGIA PEDIATRICA**
**TRAPIANTO DI CELLULE STAMINALI EMopoietiche**

**Evaluation form for oral therapy at home**

- **Do you know the medicines that you will need to take orally at home?**

  **No, Delivered list here:**
  - [ ] signature

  **Yes, verbal check of knowledge:**
  - [ ] Bexnov
  - [ ] antra
  - [ ] Sandimmun
  - [ ] Acyclin
  - [ ] Cortisone
  - [ ] Lasix

**Notes:**

**Signature _____ date ______ To be re-evaluated: [ ] no [ ] yes [ ]**
Oral Therapy at home

Do you understand the importance of the medications that the patient will take orally at home?

**NO: Repeat education**

- Date: 
- Signature: 
- Date: 

**Yes: Verbal check of the knowledge**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Correct</th>
<th>Incorrect</th>
<th>To Reinforce</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bactrim</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
<tr>
<td>Antra</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
<tr>
<td>Sandimmun</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
<tr>
<td>Azyclin</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
<tr>
<td>Cortisone</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
<tr>
<td>Lasix</td>
<td>[ ] Yes</td>
<td>[ ] No</td>
<td>[ ] To reinforce</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

Signature: 
Date: 
To be re-evaluated: [ ] No, [ ] Yes
Oral Therapy at home

- **Practical demonstration on dosage and administration**: Did you understand all steps?
  - **Yes**: Verbal check on dosage/dilution/times of administration
  - **No**: Need more information

- **Dosage and administration by the patient/caregiver**: Are you sure in every step?
  - **Yes**: Practical and verbal check on dosage/dilution/times of administration
  - **No**: Need more information

Please sign and date the form to indicate completion and evaluation.
Oral Therapy at home

Did you receive the weekly schedule of the drugs to be administered at home? Is it all clear?

No: need more information: What

In date __________________ Signature __________ date ____________

Yes: verbal check on times of administration

Signature __________ date __________ To be re-evaluated: no [ ] yes [ ] __________

Do you need more information on

________________________________________________________________________

Signature __________ date __________ To be re-evaluated: no [ ] yes [ ] __________

________________________________________________________________________

Signature __________ date __________ To be re-evaluated: no [ ] yes [ ] __________

Education for __________________________ firma caregiver __________________________

Date discharge/transfer __________________________ Signature __________________________
## Oral Therapy at home

<table>
<thead>
<tr>
<th>Name</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bactrim</em> 80 mg x 2 sabato*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>0,5 mg (1 cp da 0,5mg) x 2</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Antra</em> 40 mg x 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Omeprazolo (2 cp da 20 mg) x 1</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Tacrolimus</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Acidin 800 mg x 3</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Acidovir 1 cp da 800 mg x 3</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Diflucan 200 mg x 1 (fluconazolo)</em></td>
<td>14</td>
<td>14</td>
<td></td>
<td></td>
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<tr>
<td><em>1cp da 200 mg x 1</em></td>
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<tr>
<td><em>Ursacol (acido ursodesossicolico) 450 mg x 2</em></td>
<td>9</td>
<td>21</td>
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<tr>
<td><em>1cp da 300 mg + 1cp da 150mg x 2</em></td>
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</tr>
<tr>
<td><em>Medrol 10 mg x 2</em></td>
<td>9</td>
<td>23</td>
<td></td>
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</tr>
<tr>
<td><em>metilprednisolone cp 4 mg (2,5 cp x 2) ose</em></td>
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</tr>
<tr>
<td><em>metilprednisolone cp 16 mg (1/2 cp) + cp 4 mg (1/2 cp) x 2</em></td>
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</tr>
<tr>
<td><em>Medrol 12 mg x 1</em></td>
<td>16</td>
<td>16</td>
<td></td>
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</tr>
<tr>
<td><em>metilprednisolone cp 16 mg (3/4 cp x 1)</em></td>
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</tr>
<tr>
<td><em>metilprednisolone cp 4 mg (3 cp x 1)</em></td>
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</tr>
</tbody>
</table>

Delivered on the date: ____________________________

Physician signature: ____________________________

Nurse signature: ____________________________
You have just been discharged from hospital after hematopoietic stem cell transplantation. At home, you are going to continue with the immunosuppressive therapy taking it orally – soft capsules or syrup – instead of intravenously. In your hospital discharge letter, you will find instructions about formulation, doses and timing.
Barrows Cards

THIS MORNING YOU HAVE YOUR BLOOD TEST AT THE DAY HOSPITAL.

“I’LL TAKE MY THERAPY ANYWAY.”

WRONG

Immunosuppressive blood concentration varies according to the time of the last intake. After taking the medicine, your blood test would show an unusually high blood concentration.
Barrows Cards

**ORAL SUSPENSION HAS AN UMPLEASANT TASTE.**

“I’LL DILUTE IT WITH SOME GRAPEFRUIT JUICE.”

**WRONG**

Taking the immunosupressor in combination with grapefruit juice increases its bioavailability because of an interference of the fruit with the drug metabolizing enzyme system.

If you feel like drinking something you can dilute the oral solution with any other juice or non-alcoholic drink, according to your taste!
# Results

## Barrows Cards in the immunosopressive Therapy

<table>
<thead>
<tr>
<th>Anno</th>
<th>Trapianti allogenici</th>
<th>Pazienti italiani</th>
<th>Pazienti Stranieri</th>
<th>Barrows In italiano</th>
<th>Barrows in Inglesi</th>
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</thead>
<tbody>
<tr>
<td>2013</td>
<td>18</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>-</td>
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<tr>
<td>2014</td>
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<td>4</td>
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</table>
## Results

### Barrows Cards in the Low Microbial Diet

<table>
<thead>
<tr>
<th>NUMBER CARD</th>
<th>POWER/ QUALITY RECOMMENDATIONS</th>
<th>SCORE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>B 3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>B 3</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>A 2</td>
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<tr>
<td>4</td>
<td>A 3</td>
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<td>3</td>
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<tr>
<td>6</td>
<td>A 2</td>
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<tr>
<td>7</td>
<td>B 3</td>
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<tr>
<td>8</td>
<td>A 2</td>
<td>3</td>
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<tr>
<td>9</td>
<td>A 2</td>
<td>3</td>
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<tr>
<td>10</td>
<td>B 3</td>
<td>1</td>
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<tr>
<td>11</td>
<td>B 3</td>
<td>1</td>
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<tr>
<td>12</td>
<td>A 2</td>
<td>3</td>
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<tr>
<td>13</td>
<td>A 3</td>
<td>2</td>
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<tr>
<td>14</td>
<td>A 3</td>
<td>2</td>
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<tr>
<td>15</td>
<td>A 2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>A 3</td>
<td>2</td>
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### Level of evidence

<table>
<thead>
<tr>
<th>Level of evidence</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 2</td>
<td>3</td>
</tr>
<tr>
<td>A 3</td>
<td>2</td>
</tr>
<tr>
<td>B 3</td>
<td>1</td>
</tr>
</tbody>
</table>

validation and creation score card (pilot test in progress).
Discussion

Financial Sustainability:

- no "start-up" cost
- no "per year" cost
- savings per year

Indicators:

- Blood Value Ciclosporin,
- Hospitalization costs
- number of phone calls for the Family’s doubts
- Family satisfaction
- satisfaction nurse educator.
The qualitative analysis

results in a

**higher satisfaction:**
User (adolescent and family)
nurse educator

**Fewer:**
telephone calls for clarification / problems

**No complications at home**
no hospitalizations for seizures

**A reduction of blood samples for cyclosporine dosage**

*Sim J (1998) Collecting and analysing qualitative data: issues raised by focus group.
Journal of advanced Nursing; 28: 345-352*
Next Steps

The study is "in progress":

- To **extend** the educational tool for families.
- **Validate** the "score card" in the use of Barrows card for Low Bacterial Diet.
- **Validate** the instrument in **English**.
- **Validate** the tool in **other languages**

The Barrows cards future

Apply the tool in **other settings**

Design and evaluate the tool for therapeutic education with **other objectives**

(Managing central venous catheter at home?)

**Monitor** the contents of telephone triage

*Sim J (1998) Collecting and analysing qualitative data: issues raised by focus group. Journal of advanced Nursing; 28: 345-352*
General Remarks about TPE

**Involvement** of whole HCST Team

Identification of a person(s) **Responsible for Education**

**Recognition and transcription** of what we do

Educational aspects **considered** and **written** in the existing nursing record

better **management** of patient **discharge**
The feedback allows us to keep **checking** the educational process.

Greater **confidence**

Significant Increase in the number of **questions** from parents.

The evaluation of their **progress** makes parents more **self-confident** at the discharge.
Thank you for your attention.