



## ANMCO Position Paper: hospital discharge planning: recommendations and standards

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**Preamble: The Italian Association of Hospital Cardiologists (ANMCO) believes that the improvement in the management of hospital discharge is crucial and qualifying in the care delivery. This consensus document expresses the opinion of ANMCO and reflects its official position. The document includes recommendations and quality standards.**

#### KEYWORDS

Discharge planning;  
Multidimensional evaluation;  
Multidisciplinary team;  
Therapeutic reconciliation

The hospital discharge is often poorly standardized and affected by discontinuity and fragmentation of care, putting patients at high risk of both post-discharge adverse events and early readmission. The present ANMCO document reviews the modifiable components of the hospital discharge process related to adverse events or re-hospitalizations and suggests the optimal methods for redesigning the whole discharge process. The key principles for proper hospital discharge or transfer of care acknowledge that the hospital discharge:

- is not an isolated event, but a process that has to be planned as soon as possible after the admission, ensuring that the patient and the caregiver understand and contribute to the planned decisions, as equal partners;
- is facilitated by a comprehensive systemic approach that begins with a multidimensional evaluation process;
- must be organized by an operator who is responsible for the coordination of all phases of the hospital patient journey, involving afterward the general practitioner and transferring to them the information and responsibility at discharge;
- is the result of an integrated multidisciplinary team approach;
- appropriately uses the transitional and intermediate care services;
- is carried out in an organized system of care and continuum of services; and
- programs the passage of information to after-discharge services.

## Introduction

The progressive aging of the population has led to the increase in the number of hospital admissions of complex patients, who require both a multidisciplinary (MD) approach and a co-ordination with post-hospital services. Such bad senescence epidemic is accompanied by a reduction in the number of hospital beds, causing increasing pressure on health professionals, aimed at reducing the duration of hospital stays. Hospital discharge is often poorly planned and standardized and frequently causes discontinuity and fragmentation of care, putting patients at risk of adverse events after discharge or early readmissions. Actually, a poor management can determine up to 20-50% of either untimely or delayed discharge, often causing avoidable early readmission<sup>1-4</sup> (*Table 1*). Therefore, the management of the hospital discharge should be seen as a whole planning, activated at the time of hospital admission.<sup>5</sup>

## Key principles

For an effective discharge, the key principles acknowledge that it:

- is not an isolated event, but a process that has to be planned soon after the admission, ensuring that both

the patient and the caregiver understand and actively contribute to the planned decisions, as equal partners;

- is facilitated by a comprehensive systematic approach that begins with the evaluation process;
- is the result of an integrated MD team approach;
- is organized by an operator who is responsible for the coordination of all phases of the patient hospital journey, involving the general practitioner;
- appropriately uses the transitional and intermediate care services;
- is carried out in an organized system of care and continuum of services; and
- plans and programs the information transfer to the after-discharge services.

## The discharge as a systemic process

The European Society of Cardiology properly recommends that the discharge of patients with acute cardiovascular diseases occur in a structured mode,<sup>6</sup> thus producing a significant reduction in mortality at 1 year.<sup>7,8</sup> Certainly, the paper does not provide detailed overall operational procedures. International<sup>9</sup> and national<sup>10</sup> organizations have agreed on the modalities for improving the quality of the discharge procedure, seeing it not as an isolated event but as a process during

**Table 1** The most common hospital management deficiencies

- Delayed discharge
- Early assessment lacking
- Absent/inadequate discharge planning
- Inattention to the special needs of vulnerable groups (i.e. frail elderly, cognitive impairment, disability).
- Inadequate discharge notice
- Inadequate involvement of patient, relative, and caregiver
- Poor communication/co-ordination between hospital and post-hospital services
- Early avoidable re-admission
- Untimely discharge, before clinical stabilization or completion of post-hospital care coordination
- Lacking therapeutic reconciliation
- Inadequate management of therapy
- Inadequate planning of the transfer service
- Delayed or no follow-up
- Lack of teaching of the warning signs of the disease
- No planning of follow-up tests or treatments
- Absent/poor communication between health workers and family members
- Absent/poor communication between hospital and post-discharge services

**Table 2** The 10 stages of proper discharge/transfer planning

- (1) Start discharge planning or transfer prior or close to admission
- (2) Determine if the patient has simple or complex needs
- (3) Develop a clinical management plan for all patients within 24 h of admission.
- (4) Co-ordinate the process of discharge or transfer by creating a manager or a chain of responsibility
- (5) Establish an expected date of discharge or transfer within 24-48 h of admission, in agreement with the patient and family members
- (6) Review the clinical management plan every day, modifying and updating the expected date of discharge.
- (7) Involve the patient and family members
- (8) Plan discharge or transfer on all days of the week, including holidays.
- (9) Use a checklist 24-48 h before discharge
- (10) Confirm the discharge feasibility in the expected discharge date.

which an individualized patient plan, based on the identification of the needs and the clarification of post-hospital destination, is prepared.<sup>11</sup> Such planning is developed in several stages (Table 2),<sup>12,13</sup> graphically summarized in Figure 1.

The plan should be drawn up within 24 h from admissions, allowing both an early identification of all obstacles to the discharge or transfer and a possible implementation of appropriate corrective actions. After the initial evaluation, the clinical management plan selects the objectives to be achieved, sharing them with the patient and family. The result is a hospital journey significantly improved in speed and quality. The involvement of all actors (cardiologists, nurses, general practitioners, cardiac rehabilitation, and continuity of care services) should be synergistic and can be effective only if they share objectives, instruments, modes of implementation.<sup>14</sup>

### Multidimensional assessment and individual care plan

The increasing number of admissions of frail elderly patients affected by multiple comorbidities makes it clear that interventions specifically medical or surgical are not sufficient to achieve the best clinical outcomes, but it requires a multidimensional approach, namely demographic, biological, social, and environmental. Such method is a MD diagnostic as well as therapeutic process, conducted through a comprehensive evaluation—identifying the physical, psychological, functional, and social problems—aimed at the customization of therapeutic intervention,<sup>15-17</sup> using scales and validated tools for defining a co-ordinated and tailored health care action plan.<sup>18</sup>

Such scheme, allowing to switch from needs to services through a continuous updating of targets, becomes a working tool that puts into play the resources and the expertise needed to monitor the results and possibly to refocus on specific care needs.

### Patients in need of a discharge planning

In general, all patients require a more or less specific programming. In fact, it is necessary to consider important aspects, often neglected, such as the acquisition of in-depth information on psychosocial and socio-economic aspects, the establishment of timely and effective linkages with the territorial structures, and involvement of patient as well as caregivers.

All patients admitted to a cardiology department, either electively or urgently, should undergo, ideally just after the admission, a complete assessment and the creation of a discharge planning. On the contrary, if the healthcare facility chooses to plan only for selected high-risk patients, it is necessary to make a prognostic stratification.

Patients with chronic conditions (i.e. heart failure, diabetes and chronic obstructive pulmonary disease) are at higher risk of repeated hospitalizations and avoidable readmissions. For example, the 90-day readmission rate of diabetic patients is over 25%.<sup>19</sup> Even the elderly are at risk, especially those with cognitive deficits and social issues. Many patients with post-hospital early complications have had multiple hospitalizations over the course of the last year.<sup>20</sup>

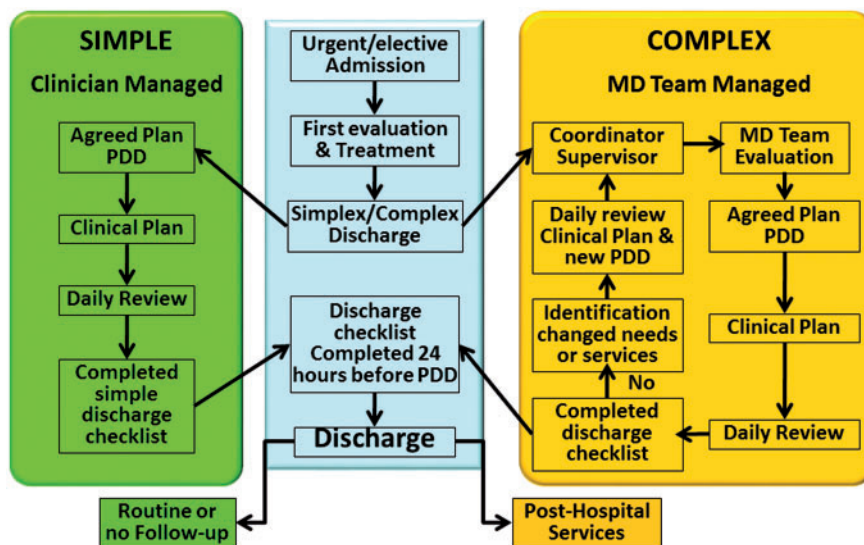


Figure 1 Discharge planning flow chart; PDD: Planned Discharge Date.

The LACE index score can be used to select a high-risk population.<sup>21</sup>

Moreover, the Blaylock Risk Assessment Screening Score (BRASS) allows identifying three classes of risk<sup>22</sup>:

- Low (score 0-10): discharge planning not necessary.
- Average (score 11-19): discharge planning required.
- High (score 20-40): discharge planning as well as continuity of care in rehabilitation facilities or institutions needed.

Proper stratification at admission can activate a set of measures aimed at improving the prognosis of these complex patients.<sup>23</sup>

### The multidisciplinary team

The multidisciplinary (MD) team works to produce recommendations in the patient clinical approach, focusing on the physical, psychological and social person's needs,<sup>24</sup> improving the outcome and satisfaction of both the patient and team members.<sup>25</sup> The patient is ready for discharge when clinical, functional, psychological and social indicators have been carefully considered in the MD assessment.<sup>26</sup>

The MD work is carried out in different circumstances<sup>27,28</sup>:

- Patients with simple needs (80% of cases): required interprofessional relationships with precise instructions and feedback. One example is the specialist consulting.
- Patients with moderately complex needs (10-15%): necessary more than one professional or service, with scheduled meetings and coordination. One example is the heart team.

- Patients with highly complex needs (2-5%): required both a MD assessment and an integrated planning. It necessitates communication 'face to face' of professionals and representatives of hospital and post-hospital services, taking decisions by consensus.

The MD team ensures that:

- Decisions regarding the patient discharge are taken at an early stage of hospitalization.
- The plan of care and the expected date of discharge are recorded in the medical chart.
- Diagnostic tests and procedures are planned to avoid delays.
- The patient condition is daily revalued and the presumed discharge date is accordingly changed.
- The nursing team proactively organizes both the process of discharge and the activation of post-hospital services.

### Nurse facilitated hospital discharge

Nurse-facilitated discharge encompasses the needs of complex chronic patients in the critical moment of hospital dismissal.<sup>29</sup> This activity should not be interpreted as a uniprofessional act, but instead it is decided by the MD team and is based on clinical and organizational pre-arranged and measurable criteria.<sup>30,31</sup> In practice, no more than 24h before the appointed date, the medical team assesses the patient clinically and prepares a discharge summary. The competent member of the nursing staff documents that the patient has met the clinical and organizational criteria within 1 h before discharge.<sup>32</sup> Table 3 shows the organizational discharge criteria. Thus, patients should be discharged within the first hours of the morning, allowing a better distribution of work and an optimal management of beds.

**Table 3** Nurse pre-discharge checklist

- Contact family members to confirm the date/time of discharge
- Establish agreements patient transport at home
- Confirm the arrangements for the transfer to post-acute care facility, including the acceptance of the receiver structure, the copy of the relevant parts of the medical paper, the discharge requirements.
- Confirm the arrangements for each medical supply or equipment to be provided at home
- Confirm the arrangements for home care
- Ensure the medical record is complete with all the prescribed tests and related results
- Make sure the patient has been educated on his/her pathology
- Ensure the follow-up appointments have been set
- Provide the patient/family the sheet of prescribed treatments, medications, the nutritional and activity plans, the follow-up appointments list.
- Ensure the understanding by the patient/family, using the 'teach back' technique and provides a demonstration of every prescribed health care practice
- Provide the patient/caregiver the names of contact persons, including telephone numbers in case of emergencies
- Deliver the discharge summary
- Collect the caregiver's signature on the sheet of discharge information.
- Sign and date the same sheet and return the original to the caregiver
- Document the discharge in medical chart.

## Recommendations

- A written protocol for the discharge planning should be used for all patients.
- The identification of the multiple personal problems, especially in elderly, should be performed early after admission.
- All patients who are likely to suffer negative consequences caused by the absence of a discharge planning should be identified at an early stage of hospitalization.
- A discharge planning for all patients of the previous point or on request of the patient/caregiver should be made.
- The planning, with an expected discharge date, should be completed within 24-48 h after admission
- The patient and caregiver should be involved early in the planning process
- A MD team assessment, completed within 24-48 from the admission, is necessary for all patients in need of a discharge planning.
- The plan should be reviewed daily, updating the expected date of discharge.
- The conclusion of agreements for the post-hospital care should be completed before the date of discharge or transfer

- In the MD process of discharge, a greater involvement of the nursing team as well as the use of nursing management checklist are recommended.

## Involvement of patient and caregiver

In clinical practice, often not enough resources are dedicated to the quality and completeness of information that patients receive during hospitalization and at discharge, resulting in a series of negative consequences.<sup>33</sup>

The involvement of the patient in managing their own care increases patient satisfaction and produces clinical and economic positive effects.<sup>34-36</sup> The members of the family, or another caregiver, are key partners in patient care and they have to receive both the information about the patient's clinical condition and the support necessary to participate in the planning and in the care delivery. However, a paternalistic attitude still prevails in the decision-making management.<sup>37</sup>

The sharing of decisions involves adequate information on the various options, the comprehensive and objective explanation of the possible alternatives, not hiding uncertainties and risks, and the respect of preferences.<sup>38,39</sup> The caregiver should be not only informed, but also backed with a specific, standardized educational training carried out during the hospitalization, resulting in a better patient prognosis.<sup>8</sup>

At discharge, communication and verbal information should be supplemented with a written list of instructions, functional to the cultural level of the subject, and other materials as brochures and booklets.<sup>40,41</sup> In this context, the nurse team can play an important educational role, managing the specific intervention protocols on lifestyle modification and drug therapy adherence. The counselling and coaching are useful tools for health professionals. The first uses as main instrument the motivational interviewing, aimed at strengthening the patient's motivation to change lifestyle.<sup>42-44</sup> Such structured counselling is positive in terms of prognosis of patients with cardiovascular disease,<sup>45-47</sup> even when performed by nurses.<sup>48</sup>

The health coaching is a training strategy that encourages the transition of the patient from a passive to an active condition, leading to improvement in physiological and psychosocial indicators.<sup>49,50</sup> The teach-back method is a communication confirmation technique, in which the health worker asks the patient or the caregiver to explain in their own words what they have just learned by the same operator, allowing to identify and correct any misunderstanding.<sup>51</sup>

The routine use of checklists on the educational interventions allows complete information and highlights any gaps.<sup>52</sup>

## Recommendations

- The patient and caregiver should be involved as equal partners in all decision-making processes, respecting their choices.
- Such involvement and active participation should be timely, even in the planning stage.

- The patient and caregiver should be provided with easy-to-understand information regarding medical conditions, how these can be improved and the mode and time of discharge.
- It is recommended:
  - Initiate patient education right from the admission and continue throughout the hospital stay, according to a standardized protocol.
  - Identify early caregivers and extend to them the training and educational materials
  - Evaluate constantly the degree of understanding/remembering using the teach-back technique.

## Co-ordination of hospital patient journey

At the entrance, a team member, usually a nurse, should be identified to co-ordinate all stages of the patient's hospital stay, supporting and facilitating the work of the MD team (Table 4).<sup>53</sup> This coordinator must focus primarily on patients with additional and complex needs.

The transfer of a patient from a hospital operating unit to another is a critical process, often unstructured and not standardized, resulting in a possible danger. Patients with advanced age and chronic comorbidities receive care from many health professionals and move within the hospital, making them particularly vulnerable to interruptions in the flow of information and care.<sup>54,55</sup> A transfer executed with proper planning, a complete set of information and a shared schedule improves the quality of care and reduces the risk of complications.

The three main barriers to a proper transfer are related to communication troubles,<sup>56</sup> lack of standardization<sup>57</sup> and poor training of the operators. To overcome these limitations several strategies have been proposed, such as standardization methods with the use of modules, mnemonic,<sup>58</sup> online forms, checklists, computer technologies, and training sessions for operators.<sup>59</sup>

The goal of an effective transfer, properly programmed and executed, is to provide accurate and timely information regarding the treatment plan, current medical conditions and any programmed change (Figure 2).<sup>60</sup>

A formal and shared plan should be established for the transfer.<sup>61</sup> Both the doctor and the nurse responsible for the transfer writes documents containing all the necessary elements.

## Recommendations

- For any admission, either elective or urgent, a member of the team should act as co-ordinator, planning both the in-hospital care, the discharge process and the follow-up.
- The transfer to another Unit has to be planned and standardized.
- There should be paper or electronic materials and standard procedures for transfer.
- Staff training on the transfer procedure should be performed and documented.

**Table 4** The discharge coordinator tasks

- Co-ordinate the planning of care with daily review.
- Negotiate with the patient and the caregiver an expected date of discharge or transfer, within 24-48 h of entry
- Ensure that hospital appointments with specialists are timely organized, that test results are received and examined and that any delay is eliminated
- Involve and inform the patient about all aspects of the treatment plan
- Involve the caregiver and assess their needs to provide care to the patient.
- Keep patient records updated
- Collaborate with the MD team
- Work with post-hospital services
- Conclude programming for discharge/transfer 48 h before the expected date of discharge
- Ensure that the patient's condition is stable at the time of discharge/transfer
- Confirm the scheduled follow-up.

## Management of drug therapy

A high percentage of hospital readmissions is due to discrepancies in drug therapy taken before and after admission.<sup>62</sup> Admission, transfer to another department and hospital discharge represents the phases of care transition, where there is the greatest risk of errors in the management of drug therapy.<sup>63</sup> To avoid dangerous effects, the patient and the caregiver must understand the rationale of the therapeutic regimen, learning how to take new medicines, whereas the general practitioner should have updated information in order to revise the therapeutic home care plan.<sup>64</sup>

The World Health Organization,<sup>65</sup> national<sup>66</sup> and regional<sup>67</sup> agencies have recommended specific actions for the prevention of medication errors arising from inadequate therapy reconciliation, and established that each healthcare facility should draw up an ad hoc procedure.

The therapeutic reconciliation is a formal process for preparation and updating a complete and accurate list of all medications the patient is taking, including the name of the drug, the dose, the route of administration. Such a list, including the reasons for the changes made, accompanies the patient from admission to discharge.

The procedure identifies three distinctive phases:

- (1) Reconnaissance, carried out by a doctor or a nurse through an appropriate form, identifying all the drugs or substances that the patient was taking.
- (2) Reconciliation, comparing that list with the current therapy, noting any possible drug interaction
- (3) Communication to give the patient/caregiver and the general practitioner.

## Recommendations

- The operating unit should have a standardized procedure for therapeutic reconciliation.

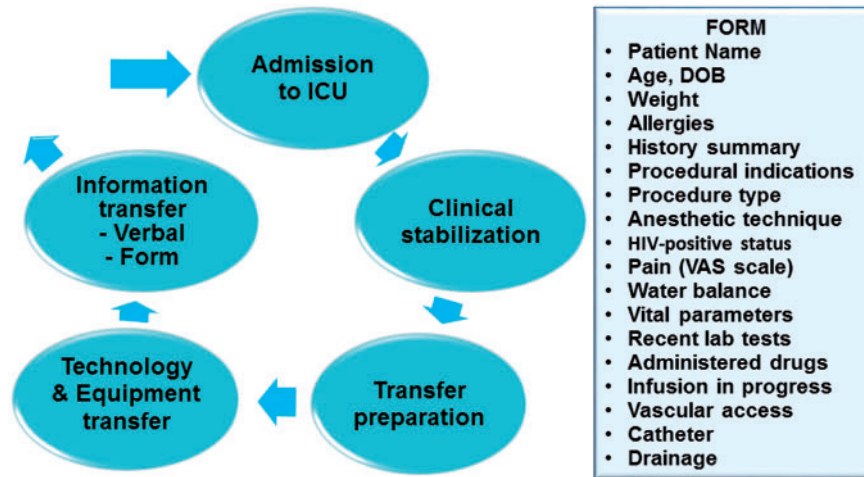


Figure 2 The sequence for transferring the patient (left); minimum items that should appear on the form (right).

- A health-care professional training on therapeutic reconciliation should be carried out.
- On admission, the most accurate possible list of medications has to be drawn up.
- There should be a standardized form to collect the list of used drugs and any changes made, continually updated and delivered at discharge to the treating physician.

### Integrated medical/nursing discharge summary

The information contained in the discharge summary is essential for the passage of relevant data, providing the basis for the quality and continuity of care. Minimum standards for the discharge summary have already been established.<sup>68,69</sup> Upon admission, it is advisable to fill in a continuously updated summary in electronic form, with the details of the tests and procedures performed, thus developing an essential and comprehensive data set to be included in the discharge summary. In fact, at discharge, the diagnosis should be comprehensive, including comorbidities and every active medical problem for which the patient received a treatment, including tests, procedures, and consultations carried out and relevant to the clinical management decisions. It is advisable to write a brief description of the clinical course.

Often the information arising from the MD assessment, essential in patients with complex needs, has no place in the discharge summary. In particular, the nursing care is an important but often neglected part of the clinical documentation. The development of an efficient nursing computerized documentation system—where the nursing multidimensional assessment carried out at the admission, the problems emerged during the hospitalization, the nursing measures put in place and their outcome, the educational interventions carried out and the planning of subsequent educational interventions are listed—can add important pieces of information.<sup>70</sup>

Indicators are highly informative variables, which allow a concise evaluation of complex phenomena and provide the information needed to guide the decisions.<sup>71,72</sup> The identification of process indicators for the discharge summary allows in a simple way to assess the quality of this complex process.

### Recommendations

- A medical and nursing compendium should begin to be filled in at admission and updated during the whole hospitalization, preferentially on electronic forms.
- The discharge summary has to meet the minimum standard criteria and it should be drawn up on a standardized form.
- The nursing multidimensional assessment and educational/informational interventions carried out should be part of the discharge summary.
- There should be an operational a system on site to assess the quality of the discharge summary.
- At least 80% of the discharge summary should reach the maximum score at the assessment of indicators

### Imaging management

The development of hardware and software system for images storage and transmission allows to manage the enormous amount of diagnostic images generated in the digital age. Thus, doctors, even in different locations and simultaneously, may have unlimited access to the images, both temporally and spatially (i.e. whether at the patient's bed or at home). The easy accessibility archive allows a comparison of previous examinations and reduces the need for repeated checks,<sup>73</sup> but often the majority of the images is created in departmental 'silos', fragmented and separated from other structures of the welfare system. Overcoming this fragmentation may allow a huge benefit in the continuity of care.

## Recommendations

- During hospitalization clinically relevant images should be selected and be available at discharge
- It is recommended the adoption of an image storage and transmission systems, to eliminate the barriers to their use.

## Continuity of care

Given the heterogeneity of the patients admitted to the cardiology units, an early identification for each patient of a precise post-hospital setting is needed.<sup>74</sup> Referring the patient to a post-hospital care setting should include both an optimal transfer of information characterizing the specific case and the interaction with the local structures responsible for the follow-up.<sup>75</sup> Being a one-way, static communication, the discharge summary fulfils only partly the task of encouraging coordination between hospital and territory. Conversely, the access to post-hospital setting should be bi-directional, utilizing computer-based approaches through shared databases.

## Recommendations

- The hospital operating unit should be proactive in promoting the flow of information to and from the post-hospital services, favouring the development of shared two-way databases.
- The identification of post-hospital patient location should be performed early in the course of hospitalization, involving the patient, the caregiver and the territorial services.

## Against-medical-advice discharge

Leaving the hospital against medical advice represents the 0.8-2% of all discharges.<sup>76</sup> These patients represent a high-risk group for both morbidity, mortality and early readmissions.<sup>77</sup> The main predictors of self-discharge are male gender, young age, non-high socioeconomic class, substance abuse and presence of psychiatric disorders.<sup>78</sup> Many patients, before threatening abandonment of the hospital, show clear signs of emotional stress, often misunderstood or underestimated.<sup>79</sup>

On the contrary, an objective assessment, not critical but empathic, represents the backbone of the therapeutic alliance.

Three conditions have to be met in the management of self-discharge:

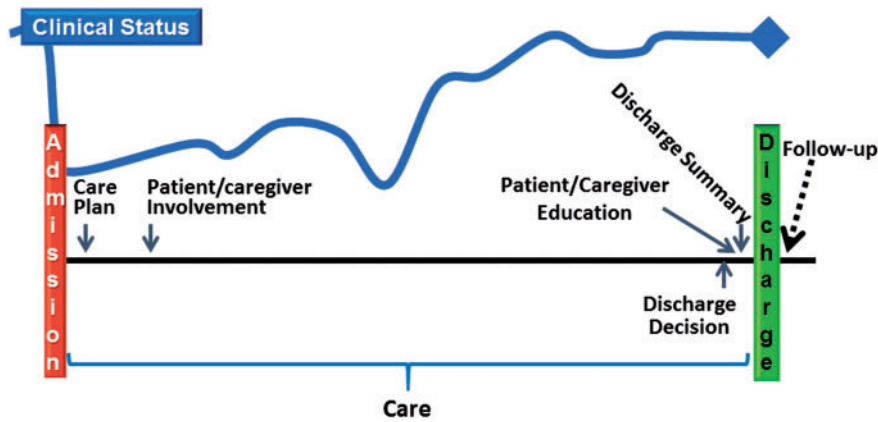
- The patient has the ability to make decisions.
- Any potential risk has been already explained.
- The whole discharge management has to be documented in the medical record.

Signing a self-discharge, the patient exercises the right of refusal of care set out in Article 32 of the Italian Constitution. Established the patient ability to make independent decisions, the complete information on the risks related to the discharge against medical advice is an ethical obligation. The use of a standardized model or a checklist allows simplifying the task, ensuring both the completeness and the accuracy of the documentation (Table 5).<sup>80</sup> The discharge should not interrupt the therapeutic alliance, but only transfer it to another care setting, usually an outpatient clinic.<sup>81</sup> The early involvement of the family and the primary care doctor is always indicated.

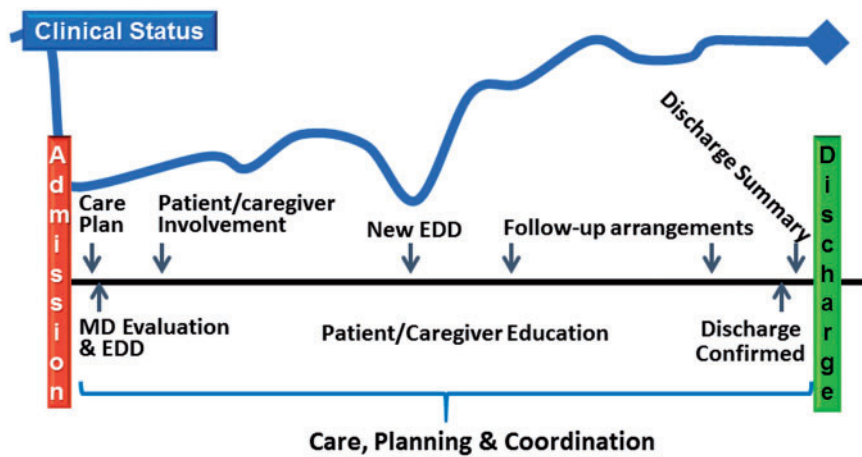
**Table 5** Phases of the against-medical-advice discharge

Issue	Specific measure
Ability to understand and express a choice	<ul style="list-style-type: none"> <li>• Explain:               <ul style="list-style-type: none"> <li>• the recommended treatment and the possible alternatives</li> <li>• the severity of the disease and the possible consequences of self-discharge</li> </ul> </li> <li>• Evaluate understanding:               <ul style="list-style-type: none"> <li>• Ask to explain the diagnosis</li> <li>• Ask to illustrate the consequences of self-discharge</li> </ul> </li> <li>• Evaluate the rationale of the patient in their decision</li> <li>• Document in medical chart</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>• Explain the specific scenarios that might recommend an immediate access in emergency room after discharge.</li> <li>• Organize:               <ul style="list-style-type: none"> <li>• A telephone follow-up or a home care service</li> <li>• A follow-up appointment within the next 7 days.</li> </ul> </li> <li>• Prescribe treatment and explain the use of prescribed medications.</li> <li>• Document in medical chart.</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Provide a brief summary of the diagnosis, the treatments carried out, the suggested drugs and the planned follow-up.</li> <li>• Inform the general practitioner of the patient</li> <li>• Inform family members, with the patient consent</li> <li>• Document in medical chart</li> </ul>





**Figure 3** Overview of the management of an unplanned discharge; the whole hospitalization time is aimed at the treatment and not to the settlement of an optimal discharge.



**Figure 4** Overview of the management of a planned discharge. The coordination and planning occupy an appropriate role. EDD: Expected Date of Discharge.

## Recommendations

- The operating units need to have a standardized protocol for the management of voluntary discharge.

## Conclusions

More and more patients with complex needs are admitted to Cardiology Departments. Much ink has been spilled to encode the optimal characteristics of the discharge summary. Actually, the discharge management should not be seen as an event that begins and ends with the discharge summary, but instead as a process, an integral part of the assistance, which starts with the patient admission and develops throughout the hospitalization.

An effective management of hospital discharge requires the presence of structure (operators, equipment, training, data collection) and encoded processes (standards, protocols, procedures), aimed at a systemic approach (program, organization, organizational culture), all together leading to positive outcomes (quality, safety, satisfaction). There is an

opportunity to redesign the patient's journey and improve their flow to create a significant benefit in the management of hospital beds, at the same time improving the quality and safety of care. In fact, the process of discharge from the hospital consists of a multiplicity of events that must run in parallel with the process of care. *Figures 3 and 4* show the importance of distributing the many activities linked to the discharge throughout the hospitalization, starting at early stages depending on the patient clinical condition.

## Consensus Document Approval Faculty

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## References

- Hendy P, Patel JH, Kordbacheh T, Laskar N, Harbord M. In-depth analysis of delays to patient discharge: a metropolitan teaching hospital experience. *Clin Med* 2012;**12**:320-323.
- Panis LJGG, Verheggen FWSM, Pop P. To stay or not to stay: the assessment of appropriate hospital stay: a Dutch report. *Int J Qual Health Care* 2002;**14**:55-57.
- Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med* 2009;**360**:1418-1428.
- Glasby J, Littlechild R, Pryce K. *Show Me the Way to Go Home: Delayed Hospital Discharges and Older People*. University of Birmingham Ed, 2004. p1-70.
- Shepperd S, Lannin NA, Clemson LM, McCluskey A, Cameron ID, Barras SL. Discharge planning from hospital to home (Review). *Cochrane Database Syst Rev* 2013;**1**:41.
- Perk J, De Backer G, Gohlke H, Graham I, Reiner Z, Verschuren M, Albus C, Benlian P, Boysen G, Cifkova R, Deaton C, Ebrahim S, Fisher M, Germano G, Hobbs R, Hoes A, Karadeniz S, Mezzani A, Prescott E, Ryden L, Scherer M, Syv anne M, Scholte op Reimer WJ, Vrints C, Wood D, Zamorano JL, Zannad F. European Association for Cardiovascular Prevention & Rehabilitation (EACPR); ESC Committee for Practice Guidelines (CPG). European Guidelines on cardiovascular disease prevention in clinical practice (version 2012). The Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts). *Eur Heart J* 2012;**33**:1635-1701.
- Fattiroli F, Angelino E. L'informazione essenziale e irrinunciabile alla dimissione dal reparto per acuti dopo Sindrome Coronarica—Parte 2: Il progetto per migliorare la qualit  delle cure. *Monaldi Arch Chest Dis* 2012;**78**:138-147.
- Rogers AM, Ramanath VS, Grzybowski M, Riba AL, Jani SM, Mehta R, De Franco AC, Parrish R, Skorcz S, Baker PL, Faul J, Chen B, Roychoudhury C, Elma MA, Mitchell KR, Froehlich JB, Montoye C, Eagle KA. The association between guideline-based treatment instructions at the point of discharge and lower 1-year mortality in Medicare patients after acute myocardial infarction. *Am Heart J* 2007;**154**:461-469.
- Joint Commission International. Standard Joint Commission International per l'Accreditamento degli Ospedali. USA: Quinta edizione; 2011. p1-305.
- Assessorato della Salute Regione Siciliana. Raccomandazioni regionali per l'admissione e la comunicazione con il paziente dopo ricovero per un evento cardiologico. [http://pti.regione.sicilia.it/portal/page/portal/PIR\\_PORTALE/PIR\\_LaStrutturaRegionale/PIR\\_AssessoratoSalute/PIR\\_AreeTematiche/PIR\\_RaccomandazioneDopoRicovertopervenentocardiologico](http://pti.regione.sicilia.it/portal/page/portal/PIR_PORTALE/PIR_LaStrutturaRegionale/PIR_AssessoratoSalute/PIR_AreeTematiche/PIR_RaccomandazioneDopoRicovertopervenentocardiologico) (1 March 2017).
- Department of Health. *Discharge from Hospital: Pathway, Process and Practice*. DH, 2003. p1-104.
- Department of Health & Human Services (DHHS) Centers for Medicare & Medicaid Services (CMS). *CMS Manual System Revised Appendix A, Interpretive Guidelines for Hospitals: Discharge Planning*. Baltimore, Maryland: DHHS; 2013. p1-167.
- Department of Health. *Ready to Go? Planning the Discharge and the Transfer of Patients from Hospital and Intermediate Care*. DH, 2010. p1-32.
- Greco C, Bovenzi FM, Berti S, Abrignani M, Bedogni F, Ceravolo R, Colivicchi F, Luca L, Faggiano P, Fattiroli F, Favretto G, Giannuzzi P, Mureddu GF, Musumeci G, Olivari Z, Riccio C, Rossini R, Temporelli PL. Documento ANMCO/GICR-IACPR/GISE: L'organizzazione dell'assistenza nella fase post-acuta delle sindromi coronariche. *G Ital Cardiol* 2014;**15** (1 Suppl 1):35-275.
- Ellis G, Langhorne P. Comprehensive geriatric assessment for older hospital patients. *Br Med Bull* 2005;**71**:45-59.
- Marceca M, Mastromattei A, Pasquarella A, Casagrande S, Guasticchi G. La valutazione multidimensionale in sanit  pubblica. *Ann Ig* 2003;**15**:787-803.
- Ministero Della Salute. Direzione Generale della Programmazione Sanitaria, dei Livelli di Assistenza e dei Principi Etici di Sistema. Commissione Nazionale per la Definizione e l'Aggiornamento dei Livelli Essenziali di Assistenza. DPCM, 2001.
- Afilalo J, Alexander KP, Mack MJ, Maurer MS, Green P, Allen LA, Popma JJ, Ferrucci L, Forman DE. Frailty assessment in the cardiovascular care of older adults. *J Am Coll Cardiol* 2014;**63**:747-762.
- Kim H, Ross JS, Melkus GD, Zhao Z, Boockvar K. Scheduled and unscheduled hospital readmissions among patients with diabetes. *Am J Manag Care* 2010;**16**:760-767.
- Tuso P, Huynh DN, Garofalo L, Lindsay G, Watson HL, Lenaburg DL, Kanter MH. The readmission reduction program of Kaiser permanente southern California—knowledge transfer and performance improvement. *Perm J* 2013;**17**:58-63.
- vanWalraven C, Dhalla IA, Bell C, Etchells E, Stiell IG, Zarnke K, Austin PC, Forster AJ. Derivation and validation of an index to predict early death or unplanned readmission after discharge from hospital to the community. *CMAJ* 2010;**182**:551-557.
- Blaylock A, Cason C. Discharge planning predicting patients' needs. *J Gerontol Nurs* 1992;**18**:5-10.
- Dudas V, Bookwalter T, Kerr KM, Pantilat SZ. The impact of follow-up telephone calls to patients after hospitalization. *Am J Med* 2001;**111**:265-305.
- Carrier JM, Kendall I. Professionalism and interprofessionalism in health and community care: some theoretical issues. In: P Owens, J Carrier, J Horder, eds. *Interprofessional Issues in Community and Primary Health Care*. London: Macmillan;1995. p9-36.
- Preen DB, Bailey BE, Wright A, Kendall P, Phillips M, Hung J, Hendriks R, Mather A, Williams E. Effects of a multidisciplinary, post-discharge continuance of care intervention on quality of life, discharge satisfaction, and hospital length of stay: a randomized controlled trial. *Int J Qual Health Care* 2005;**17**:43-51.
- NHS. *Achieving Timely 'Simple' Discharge from Hospital*. Crown: London; 2004. p1-52.
- Cecchi M, Cuccuini A, Monti MG. Rapporti interprofessionali in ospedale per intensit  di cure. Osservatorio Regione Toscana ospedale per intensit  di cure 2012. [http://servizi.salute.toscana.it/csr/img/getfile\\_img1.php?id=22534](http://servizi.salute.toscana.it/csr/img/getfile_img1.php?id=22534) (1 March 2017).
- Mitchell GK, Tieman JJ, Shelby-James TM. Multidisciplinary care planning and teamwork in primary care. *Med J Aust* 2008;**188**:S63-S67.
- Tingley J, Dolansky MA, Walsh MN. Team-based transitions of care in heart failure. *Heart Fail Clinic* 2015;**11**:371-378.
- Flower L. Evaluating the development of a nurse-led discharge scheme. *Nurs Times* 2005;**101**:36-38.
- Lees L, ed. *Nurse Facilitated Hospital Discharge*. London: M & K Publishing; 2007. p1-243.
- The Newcastle upon Tyne Hospitals NHS Foundation Trust. Nurse Led Discharge Protocol. 2014. <http://www.newcastle-hospitals.org.uk/downloads/policies/Nursing/NurseLedDischargePolicy201409.pdf> (1 March 2017).
- Angelino E, Fattiroli F. L'informazione essenziale e irrinunciabile alla dimissione dal reparto per acuti dopo sindrome coronarica. Parte 1. *Monaldi Arch Chest Dis* 2012;**78**:79-84.

34. Dracup K, McKinley S, Doering LV, Riegel B, Meischke H, Moser DK, Pelter M, Carlson B, Aitken L, Marshall A, Cross R, Paul SM. Acute coronary syndrome: what do patients know? *Arch Intern Med* 2008;**168**:1049-1054.
35. Villanueva T. Transitioning the patient with acute coronary syndrome from inpatient to primary care. *J Hosp Med* 2010;**5**(Suppl 4):S8-S14.
36. O'Connor AM, Stacey D, Entwistle V, Llewellyn-Thomas H, Rovner D, Holmes-Rovner M. Decision aids for people facing health treatment or screening decisions. *Cochrane Database Sys Rev* 2003;1-46.
37. Fowler FJ, Jr, Gerstein BS, Barry MJ. How patient centered are medical decisions?: results of a national survey. *JAMA Intern Med* 2013;**173**:1215-1221.
38. Ansmann L, Kowalski C, Ernstmann N, Ommen O, Pfaff H. Patients' perceived support from physicians and the role of hospital characteristics. *Int J Qual Health Care* 2012;**24**:501-508.
39. Elliott MN, Lehrman WG, Beckett MK, Goldstein E, Hambarsoomian K, Giordano LA. Gender differences in patients' perceptions of inpatient care. *Health Serv Res* 2012;**47**:1482-1501.
40. Abrignani MG, De Luca G, Gabriele M, Tourkmani N. Il Decreto dell'Assessorato della Salute della Regione Sicilia "Raccomandazioni Regionali per la dimissione e la comunicazione con il paziente dopo un ricovero per evento cardiologico". *Monaldi Arch Chest Dis* 2014;**82**:93-104.
41. Ho PM, Bryson CL, Rumsfeld JS. Medication adherence: its importance in cardiovascular outcomes. *Circulation* 2009;**119**:3028-3035.
42. Crucetti C, Parisini L, Priami D, Beltrami P, Colonna M, D, Pasquale G, Gabusi R, Urbinati S, Ferrari A, Brambilla A, (Gruppo di lavoro "La prevenzione delle malattie cardiovascolari"). Linee Regionali: Il counseling nella relazione di (o che) cura per prevenire le recidive nei pazienti post IMA/SCA. Bologna: Centro Stampa Regione Emilia-Romagna; 2014. p1-32.
43. Rollnick S, Butler CC, Kinnerley P, Gregory J, Mash B. Motivational interviewing. *Bmj* 2010;**340**:c1900.
44. Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, Cooney MT, Corrà U, Cosyns B, Deaton C, Graham I, Hall MS, Hobbs FD, Lachen ML, Löllgen H, Marques-Vidal P, Perk J, Prescott E, Redon J, Richter DJ, Sattar N, Smulders Y, Tiberi M, van der Worp HB, van Dis I, Verschuren WM. 2016 European Guidelines on cardiovascular disease prevention in clinical practice: the sixth joint task force of the European society of cardiology and other societies on cardiovascular disease prevention in clinical practice. *Eur Heart J* 2016;**37**:2315-2381.
45. Giannuzzi P, Temporelli PL, Marchioli R, Maggioni AP, Balestroni G, Ceci V, Chieffo C, Gattone M, Griffo R, Schweiger C, Tavazzi L, Urbinati S, Valagussa F, Vanuzzo D. GOSPEL Investigators. Global secondary prevention strategies to limit event recurrence after myocardial infarction: results of the GOSPEL study, a multicenter, randomized controlled trial from the Italian Cardiac Rehabilitation Network. *Arch Intern Med* 2008;**168**:2194-2204.
46. Urbinati S, Olivari Z, Gonzini L, Savonitto S, Farina R, Del Pinto M, Valbusa A, Fantini G, Mazzoni A, Maggioni AP; BLITZ-4 Investigators. Secondary prevention after acute myocardial infarction: drug adherence, treatment goals, and predictors of health lifestyle habits. The BLITZ-4 Registry. *Eur J Prev Cardiol* 2015;**22**:1548-1556.
47. Auer R, Gaume J, Rofondi N, Cornuz J, Ghali WA. Efficacy of in-hospital multidimensional interventions of secondary prevention after acute coronary syndrome: a systematic review and meta-analysis. *Circulation* 2008;**117**:3109.
48. Wood DA, Kotseva K, Connolly S, Jennings C, Mead A, Jones J, Holden A, De Bacquer D, Collier T, De Backer G, Faergeman O. EUROACTION Study Group. Nurse-coordinated multidisciplinary, family-based cardiovascular disease prevention programme (EUROACTION) for patients with coronary heart disease and asymptomatic individuals at high risk of cardiovascular disease: a paired, cluster-randomized controlled trial. *Lancet* 2008;**371**:1999-2012.
49. Olsen JM, Nesbitt BJ. Health coaching to improve healthy lifestyle behaviors: an integrative review. *Am J Health Promot* 2010;**25**:e1-e2.
50. Kivela K, Elo S, Kyngas H, Kaariainen M. The effects of health coaching on adult patients with chronic disease: a systematic review. *Patient Educ Couns* 2014;**97**:147-157.
51. Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Grotz K, Castro C, Bindman A. Closing the Loop: physician communication with diabetic patients who have low health literacy. *Arch Intern Med* 2003;**163**:83-90.
52. "Raccomandazioni regionali per la dimissione e la comunicazione con il paziente dopo ricovero per un evento cardiologico". Decreto Regionale 11 agosto 2014, GURS (p.l) n. 36 del 29.8.2014 (n.26).
53. Houghton A, Bowling A, Clarke KD, Hopkins AP, Jones J. Does a dedicated discharge coordinator improve the quality of hospital discharge? *Qual Health Care* 1996;**5**:89-96.
54. Wenger NS, Young RT. Quality indicators for continuity and coordination of care in vulnerable elders. *J Am Geriatr Soc* 2007;**55**(Suppl 2):S285-S292.
55. Whittaker J, Ball C. Discharge from intensive care: a view from the ward. *Intensive Crit Care Nurs* 2000;**16**:135-143.
56. Berkenstadt H, Haviv Y, Tuval A, Shemesh Y, Megrill A, Perry A, Rubin O. Ziv. Improving handoff communications in critical care: utilizing simulation-based training toward process improvement in managing patient risk. *Chest* 2008;**134**:158-162.
57. Apker J, Mallak L, Gibson S. Communicating in the "gray zone": perceptions about emergency physician hospitalist handoffs and patient safety. *Acad Emerg Med* 2007;**14**:884-894.
58. Haig K, Sutton S, Whittington J. SBAR: a shared mental model for improving communication between clinicians. *Jt Comm J Qual Patient Saf* 2006;**32**:167-175.
59. Pucher PH, Johnston MJ, Aggarwal R, Arora S, Darzi A. Effectiveness of interventions to improve patient handover in surgery: a systematic review. *Surgery* 2015;**158**:85-95.
60. Joint commission center for transforming healthcare releases targeted solutions tool for hand-off communications. *Jt Comm Perspect* 2012;**32**:1-3.
61. Arora VM, Manjarrez E, Dressler DD, Basaviah P, Halasyamani L, Kripalani S. Hospitalist handoffs: a systematic review and task force recommendations. *J Hosp Med* 2009;**4**:433-440.
62. Gleason KM, McDaniel MR, Feinglass J, Baker DW, Linquist L, Liss D, Noskin GA. Results of the Medications at Transitions and Clinical Handoffs (MATCH) study: an analysis of medication reconciliation errors and risk factors at hospital admission. *J Gen Intern Med* 2010;**25**:441-447.
63. Kwan JL, Lo L, Sampson M, Shojania KG. Medication reconciliation during transitions of care as a patient safety strategy. A Systematic Review. *Ann Intern Med* 2013;**158**:397-403.
64. Hansen LO, Young RS, Hinami K, et al. Interventions to reduce 30-day rehospitalisation: a systematic review. *Ann Intern Med* 2011;**155**:520-528.
65. The Joint Commission & WHO. *Assuring Medication Accuracy at Transitions in Care. Patient Safety Solution, vol.1, solution 6*. Geneva, Switzerland: WHO; 2007. p1-4.
66. Ministero della Salute. *Direzione Generale della Programmazione Sanitaria Ufficio DGPROGS. Raccomandazioni per la riconciliazione della terapia farmacologica. Raccomandazione n. 17*. Dicembre, 2014.
67. Regione Emilia Romagna. *Raccomandazione regionale per la Sicurezza nella terapia farmacologica*. N. 1. Marzo, 2010.
68. Kind AJH, Smith MA. *Documentation of mandated discharge summary components in transitions from acute to subacute care*. In K Henriksen, JB Battles, MA Keyes, ML Grady, eds. *Advances in Patient Safety: New Directions and Alternative Approaches (Vol. 2: Culture and Redesign)*. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008. p1-10.
69. Guidelines on Regional Immediate Discharge Documentation for patients Being Discharged from Secondary into Primary Care 2011. <https://www.rqia.org.uk/RQJA/files/73/734a792f-f9d4-47f0-830f-31f9db51c82a.pdf> (1 March 2017).
70. Ammenwerth E, Mansmann U, Iller C, Eichstädter R. Factors affecting and affected by user acceptance of computer-based nursing documentation: results of a two-year study. *J Am Med Inform Assoc* 2003;**10**:69-84.
71. Focarile F. Indicatori di qualità nell'assistenza sanitaria, Torino: Centro scientifico Editore II Edizione; 2001. p1-224.
72. Gregorio G. La Responsabilità civile e penale del Direttore di S.C. In Gregorio G, Tozzi Q, eds. *Management in Cardiologia Teoria e pratica di governance cardiologica*. Roma: Il Pensiero Scientifico Editore, 2014. p.143-7.
73. Fesmire FM, Percy RF, Wears RL. Diagnostic and prognostic importance of comparing the initial to the previous electrocardiogram in

- patients admitted for suspected acute myocardial infarction. *South Med J* 1991;**84**:841-846.
74. DM Salute 2 aprile 2015, n. 70: Regolamento recante definizione degli standard qualitativi, strutturali, tecnologici e quantitativi relativi all'assistenza ospedaliera. GU Serie Generale n.127 del 4-6-2015.
75. McAllister FA, Stewart S, Ferrua S, McMurray JJ. Multidisciplinary strategies for the management of heart failure patients at high risk for admission: a systematic review of randomized trials. *J Am Coll Cardiol* 2004;**44**:810-819.
76. Ibrahim SA, Kwok CK, Krishnan E. Factors associated with patients who leave acute-care hospitals against medical advice. *Am J Public Health* 2007;**97**:2204-2208.
77. Fiscella K, Meldrum S, Barnett S. Hospital discharge against advice after myocardial infarction: deaths and readmissions. *Am J Med* 2007;**120**:1047-1053.
78. Steinglass P, Grantham CE, Hertzman M. Predicting which patients will be discharged against medical advice: a pilot study. *Am J Psychiatry* 1980;**137**:1385-1389.
79. Alfandre DJ. "I'm going home": discharges against medical advice. *Mayo Clin Proc* 2009;**84**:255-260.
80. Levy F, Mareiniss DP, Iacovelli C. The Importance of a Proper Against-Medical-Advice (AMA) discharge. *J Emerg Med* 2012;**43**:516-520.
81. Swota AH. Changing policy to reflect a concern for patients who sign out against medical advice. *Am J Bioeth* 2007;**7**:32-34.