

Day Hospitalization (DH) is defined as the care procedures which are performed in a hospital for a few hours, either for diagnosis, clinical investigation, or treatments that cannot be performed in consulting rooms but which do not require hospitalization.

On the last years, Day Hospitalization (DH) has had, both within the National Health System and the private clinics, a substantial development, which has resulted on a considerable increase of the efficiency in the care of patients, who would have otherwise been hospitalized. In 2004 nearly 1.500.000 Day Hospitalization medical sessions were performed; 1,1 sessions of this healthcare modality were performed out of 10 medical stays in hospitalization.

Day Hospital Unit, Standards and Recommendations is not a legal document and does not settle the minimum requirements for the opening or working conditions of DHU, nor the standards for their accreditation. The aim of this document is to provide public health administrations, managers of both public and private centres, and healthcare professionals with in-depth knowledge to broaden the development of Day Hospital Units (DHU) and to help improve safety and quality conditions in Day Hospitalization, in all its quality aspects, including efficient service provision. Therefore, Day Hospital Units Standards and Recommendations includes aspects relating to patients' rights and guarantees, patients' safety, DHU organization and management, physical structure and material resources of DHU, human resources and quality of DH Units.

Day Hospital Unit

Standards and Recommendations

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1 Introduction and concept of Day Hospital Units

Throughout the past twenty five years Day Hospitalization (DH) has had, both within the National Health System and the private clinics, a substantial development, which has resulted on a considerable increase of the efficiency in the care of patients, who would have otherwise been hospitalized in conventional hospitals.

Day Hospitalization (DH) is understood as the care procedures which are performed in a hospital for a few hours, either for diagnosis, clinical investigation and/or multiple examination, or for treatments that cannot be performed to outpatient centres but which do not require hospitalization.

Day Hospitalization development and integration, its variety of organizational, structural and functional possibilities and its outcome in terms of quality and patient's safety determine a priority position for its inclusion in the actions established by the Spanish National Health System Quality Plan¹, setting the creation of quality and safety criteria and promoting its evaluation as a basis for clinical and management decisions.

In order to establish the extent of this document on standards and recommendations, it has been necessary to analyse the difference among autonomous Day Hospital units, and the integrated Day Hospital units (Table 1.1.), which support the activities of the former though they lack organizational independence (independent manager or specific resources).

“Day Hospital Unit” will be considered in this document as the unit whose main activity is to provide healthcare to patients treated under this type of health service, when they have specific resources and an independent manager.

The concept of “Day Hospital Unit” responds, thus, to its structural and management characteristics. DHUs are intermediate units that carry out their activity for final health services, and whose doctors prescribe the treatments suitable to be provided to patients under this type of healthcare modality.

On the other hand, Day Hospital chairs or beds integrated within any other healthcare unit, which provide additional assistance or support to broader processes that may include other healthcare modalities, are not considered independent Day Hospital units. Among these “day hospitals” we may consider the recovery area for Day Surgery Units and the Day Hospital chairs or beds in Pluripathologic Patients Units or the hospital day chairs or beds in endoscopy or haemodynamic medical investigation and treatment units.

Integrated Day Hospital units will be dealt with at the standards and recommendation reports that may be produced in accordance with each of the unit codes provided by the Royal Decree 1277/2003. In 2008 the standards and recommendations for the Day Surgery units will be available, updating and revising the 1993 Guide, in which the characteristics for these integrated Day Hospital Units (recovery area) are settled.

Though risking of leaving aside some specific example, we suggest grouping Day Hospital units according to their structural and functional independence in DH units and Integrated DHU, to their service portfolios and to the type of patients treated under at polyvalent and specialized units. Table 1.1. classifies the structures studied according to this criteria.

Table 1.1. “Day Hospitalization” typology.

	Polyvalent	Specialized
DH units	Medical surgical Day Hospital Unit.	Oncologic and haemathologic Day Hospital Unit.
	Medical Day Hospital Unit.	Day Hospital Unit for HIV/AIDS patients.
Integrated DH units	Integrated day chair/beds within the pluripathologic, palliative and dependants units.	Medical surgical Day Hospital Unit (Recovery areas after DH).
		Beds & Chairs for Day Hospital related to diagnosis and treatment medical investigation and treatment units (endoscopy, haemodynamic treatment, polysomnography, interventional vascular radiology, etc.).

This report on standards and recommendations develops from a comprehensive perspective the specific characteristics of DH units as an independent healthcare modality, including among its topics those related to patient's rights, guarantees and safety; priority courses of action for the Ministry of Health and Consumer Affairs policy, anticipated on the Quality Plan of the Spanish National Health System (Strategy 7), taking advantage of other guides published in our country or abroad, and of the national and international experience on the application and development of DHs.

On this document there will not be considered the standards and recommendations for integrated DHUs and for those in which healthcare belongs to a broader process (surgical or radiologic) as the following, gathered on Table 1.1:

- Polyvalent integrated beds/chairs, dependant from units of pluripathologic patients, palliative care, dependants, etc.
- Specialized integrated Day Hospital Units: surgical Day Hospital Unit (recovery areas after Day Surgery) and beds/chairs related to diagnosis and medical investigation and treatment (endoscopies, haemodynamic, polysomnography, interventional vascular radiology, etc).

In the same way, Paediatric Day Hospital Units, those related to antenatal care (foetal physiopathology) or those related to Mental Health will not be considered on this report.

In 1993 the Ministry of Health and Consumer Affairs worked out a Guide for the Organization and Management of Day Surgery. So far we lack in our field of action a guide for Day Hospitalization which may provide the technical criteria for the design, equipment, organization and operation for these units; despite numerous studies² having identified a great number of profits of this healthcare modality.

The introduction, since the late eighties, of integrated and autonomous DHUs on the functional plan for development and renewal or building of new hospitals³ of the former Spanish Health Institute (INSALUD on its Spanish acronym) should be considered as a forerunner of the development of Day Hospital units. The secretary of the Spanish National AIDS plan drew up, in 1998, a brief Guide for Day Hospital Units treating patients infected with IHV/AIDS⁴, which comprises topics related to objectives

(including a portfolio of procedures to be developed in these units), structure, management and other relating to the prevention of communicable diseases and evaluation, giving special emphasis to a basic aspect so as to frame the development of these units: follow-up of medical care which would imply, for this type of patients, home assistance, outpatient consultation (primary healthcare and specialized attention), DH, standard hospitalization and admission to centres for chronic patients / palliative care.

The aim of this document is to provide public health administrations, managers of both public and private centres, and healthcare professionals with in-depth knowledge to broaden the development of Day Hospital Units (DHU) and to help improve **safety and quality** conditions in Day Hospitalization, in all its quality aspects, including efficient service provision. Therefore, the Guide includes aspects relating to:

- a) Patients' rights and guarantees.
- b) Patients' safety.
- c) Organization and management of DHU.
- d) Physical structure and material resources of DHU.
- e) Human resources.
- f) Quality.
- g) Criteria for reviewing and monitoring the DHU standards and recommendations.

Day Hospital Units Standards and Recommendations **is not a legal document** and does not settle the minimum requirements for the opening or working conditions of DHU, nor the standards for their accreditation. Its aim is **to guide on the planning and design of these units, as well as to provide quality, efficiency and safety criteria.**

Throughout the document some “strong” recommendations are highlighted, either because they are supported by legal requirements or because they are based, according to the group of experts involved on its writing, on sufficiently sound evidence. These cases will be introduced by the word “recommendation” and highlighted in **bold**.

The Directorate General of the Spanish National Health System Quality Agency has monitored the setting up of the standards and recommendations of Day Hospital Units within the frame settled by the Quality Plan of the National Health System.

It must be pointed out that the Quality Agency of the Spanish National Health System has had the support of a group of experts who have collaborated on the writing of this document. They have been selected on the basis of their experience and knowledge of the aspects covered in this Guide, as well as appointed -under the same criteria- by Scientific Societies and Professional Associations which stand out on the implementation of DHU techniques and on the development of this type of units.

Furthermore, a technical support group has assisted the Quality Agency of the Spanish National Health System in the development of the project conducting an analysis of current situation, working on the successive drafts as well as on the final document, reviewing the documents handed by the experts and analyzed evidence, and contributing to the planning and development of the meetings of the group of experts.

2 Current situation

Day Hospitalization (DH) is a specific organizational and health management modality of healthcare that responds to a particular kind of health service demand (service portfolio). It therefore requires specific structural and functional conditions which may guarantee its efficiency and quality as well as a safe environment for its users.

Day Hospital Units (DHU), classified on the Royal Decree 1277/2003⁽¹⁾ under the code U65, have had a substantial development during the last years, both within the Spanish National Health System and the private clinics, which has resulted in important benefits for healthcare centres as well as for the high number of users.

In this guide, DHU is considered, as stated by the Royal Decree 1277/2003, as: *“healthcare unit dedicated, under the supervision or instructions of a specialized doctor, to the treatment and care of patients who must undergo therapeutic or diagnostic treatment that require short post operative medical and nursing care, but do not require hospitalization”*.

The Spanish National Health System carries out a follow-up of the work done by the healthcare centres which perform Day Hospitalization, considering both autonomous and integrated Day Hospital Units. It observes, on the indicators system of the Spanish National Health service^{5,6}, the ratio of integrated DHUs per population as a structural indicator. The integrated DHUs are defined as each of the *“specific places allocated for procedures which are performed in a hospital for a few hours, for diagnosis, clinical investigation and/or multiple examination, or for treatments that cannot be performed at outpatient centres but which do not require hospitalization. A&E services are not included on these procedures”*.

Day Hospitalization may derive benefit to different types of agents:

- To patients, to whom this healthcare modality is preferable to conventional hospitalization as:
 - Consultations can be scheduled so that both patients and carers may combine the treatment and their working or home duties.

⁽¹⁾Royal Decree 1277/2003, October 10th, "por el que se establecen las bases generales sobre autorización de centros, servicios y establecimientos sanitarios" (establishing the general basis for authorization of healthcare centres, services and institutions).

- It is independently scheduled from conventional hospitalization, and thus the number of cancellations or delays is reduced.
 - Patients consider it to be less aggressive than conventional hospitalization.
 - It reduces the risk of adverse events inherent to conventional hospitalization, as nosocomial infections⁷.
- To healthcare staff, as it allows them to schedule treatment on a more direct and flexible way.
 - To managers, as it permits a more efficient use of resources, reduces waiting lists and delays on certain procedures.

2.1 DH in Spain.

The legislation that applies to DH units relates to healthcare centres and services in general. In connection with them, two different regulations are observed: one on authorization and registration, which assesses healthcare centres before they come into operation; and a regulation on accreditation, for evaluation of operational centres.

Both the State and the regional governments have issued legislation on the authorization and registration of healthcare centres. In Spain, there is no specific legislation about the requirements that Day Hospital Units must observe, applying, thus, to them the general regulations.

The legislation analyzed on this documents includes the State⁽²⁾ and the regional legislation (laws, decrees and orders).

Accreditation is a voluntary process by which a healthcare centre undergoes an external assessment which establishes its level in accordance to a set of standards settled, generally, by a group of experts.

⁽²⁾Ley 14/1986, April 25th "General de Sanidad" (General Health Law) ; Law 16/2003, (May 28th), "Cohesión y Calidad del Sistema Nacional de Salud" (Cohesion and Quality of the National Health System); RD 1277/2003, (October 10th), "por el que se establecen las bases generales sobre autorización de centros, servicios y establecimientos sanitarios" (establishing the general basis for the authorization of healthcare centres, services and institutions).

Experience of accreditation of healthcare centres and services is still very limited in Spain. Only four regions (Catalonia, Andalusia, Galicia and Extremadura) have legislation and official programmes for accreditation based on voluntary external assessment. Some regions (Madrid or the Basque Country) have accreditation programs for specific types of centres, services or activities (i.e., organ transplants, assisted reproduction, haemotherapy treatments, continued training, etc.). However, so far there is no specific accreditation system for Day Hospital centres.

Table 2.1. Regional standards and recommendations on DH.

Region	Rank of law / type of document	Aim
Andalusia	Resolution	To establish the quality accreditation system for healthcare centres and units of the Andalusian Health Service according to its quality standard.
Catalonia	Decree	To regulate the accreditation system for acute healthcare and the authorization procedures of evaluation entities.
Extremadura	Decree	To regulate the procedure and the necessary organisms means to put the quality standard and the accreditation into effect.
	Order	To settle the standards for quality of healthcare centres, services and institutions of the Region of Extremadura and the standardized model for their healthcare quality accreditation.
Galicia	Decree	To regulate the accreditation of hospitals in Galicia.
Valencia	Recommendation	Day Hospitalization actions (referring to medical-surgical DHU).
State	Recommendation	DHU for treating IHV/AIDS infected patients.

- **Andalusia**

Andalusia bases its accreditation system on the “Program for the accreditation of centres belonging to the Andalusian⁽³⁾ Health Service” aimed at promoting continuous improvement. Its starting point is based on the potential improvement of the centres and on its broad experience on

⁽³⁾Resolution July 24th 2003 of the General Directorate for Evaluation and Training, “por la que se establece el sistema de acreditación de la calidad de los centros y unidades sanitarias del Sistema Sanitario Público de Andalucía, de acuerdo con el modelo de calidad del sistema sanitario de Andalucía.” (establishing the quality accreditation program for healthcare centres and units of the Andalusian Public Health Service, in accordance with the quality model of the Andalusian Health Service Ministry of Health for the Andalusian Health Service).

quality management. The program is based on a reference standard created for the Andalusian Public Health Service, designed by professionals and managers belonging to different Assessing Technical Committees.

The “Program for the accreditation of centres belonging to the Andalusian Health Service” can be implemented in hospitals and other centres that may provide hospitalization, as well as in primary healthcare centres, speciality centres, centres for diagnosis and clinical management units. This program neither makes explicit reference to Day Hospital Units nor considers these units on its own system of indicators; however, several general indicators may be implemented.

- **Catalonia**

This region was the first to develop an official procedure for the accreditation of healthcare centres. The current system is the third that has been developed (there have been two former procedures in 1981 and 1983). The decree 5/2006⁽⁴⁾ rules the accreditation of acute healthcare centres and the authorizing procedures for the evaluation bodies. It additionally provides two accreditation guides which include the settled standards. On the essential standards guide, which has to be compulsory followed by those centres applying for accreditation, there is a chapter which refers to DH on the following terms:

**“Concept: Building adaptation – 02
Code of content 4c-02-Q05**

The structure and layout of the area allocated to outpatient healthcare are adequate to the caring needs; they ease the job of the staff and allow a rational use of human resources:

- *Outpatient consultation.*
- *Medical investigation and treatment units.*
- *Day Hospitals.*

⁽⁴⁾Decree 5/2006, January 17th, “por el que se regula la acreditación de centros de atención hospitalaria aguda y el procedimiento de autorización de entidades evaluadoras.” (which rules the accreditation system for acute hospital care and the procedures to be followed by evaluating entities). Health Department. Ministry of Health for the Catalanian Region.

For example, it will be considered as an improvement:

- *The difference between the flow towards the outpatient consultation and the diagnostic units; an opened and public one that may feed the waiting rooms and a restricted one feeding the support areas and the consultation rooms.*
- *The adaptability and multiple-function possibilities of all consultation rooms and medical investigation and treatment units.*
- *Consultation rooms with specific area for consultation and diagnosis.*
- *At Day Hospitals, adaptability and multiple-function possibilities of boxes, which will arranged around the support spaces on a unique and centralized disposition.*
- *All areas will enjoy air conditioning units which will a primary and G4 filtered air flow.”*

Among the non essential standards there is not any related specifically to DH; however, several of the standards related to medical practice can be applied to this healthcare modality.

- **Galicia**

The Region of Galicia settled in 2001 an accreditation system for hospitals, ruled by Decree⁽⁵⁾, which may be applied to all the hospitals which belong to the healthcare system of the Galician Health Service and to any other which may have subscribed or want to subscribe an agreement with them, for what they must obtain the accreditation certificate. It also points out that any hospital not included in the above mentioned information may apply for its accreditation as a guarantee for its quality level.

The Decree includes 20 areas of application, though there is not any specific for DH. Indirectly, one of the criteria (12.1.6.) refers to the

⁽⁵⁾ Decree 52/2001, February 22nd, “por el que se regula la acreditación de los centros hospitalarios de la Comunidad Autónoma de Galicia” (which rules the accreditation for hospitals of the Galician region). Ministry of Health for the Galician Region.

existence of “additional possibilities alternative to conventional hospitalization”; in which this healthcare modality could be included.

- **Extremadura**

On a similar way to the models suggested by Andalusia and Galicia, the system of centre accreditation of Extremadura, ruled by Decree⁽⁶⁾ in 2005 and a subsequent order⁽⁷⁾ that develops it, is focused towards inpatient and outpatient healthcare centres. These regulations do not make specific reference to DHUs and, as in other cases, many of the healthcare requisites and standards can be generically applied to this type of healthcare modality.

- **Valencia**

The Region of Valencia published in 2002 a document written by a group of experts⁸, which related a bound of consent documents with the scientific societies. This document cannot be considered as a regulation.

2.2 Standards and recommendations for DHUs in other countries.

2.2.1 United States.

Since 1947, the American Institute of Architects (AIA) in collaboration with the Department of Health and Human Services has published Guides for the design and building of healthcare facilities⁹, which include references to DHUs.

Neither the Department of Health and Human Services or Medicare or Medicaid have specific regulations for DHUs. There exist neither criteria

⁽⁶⁾ Decree 227/2005, September 27th, “por el que se regula el procedimiento y los órganos necesarios para la aplicación del modelo de calidad y la acreditación” (which rules the procedures and the compulsory organs for the application of quality standards and accreditation). Ministry of Health and Consumer Affairs of the Region of Extremadura.

⁽⁷⁾ Order July 18th, 2006 “por la que se establecen los estándares del modelo de calidad de centros, servicios y establecimientos sanitarios de la Comunidad Autónoma de Extremadura y el modelo normalizado de solicitud de acreditación de calidad sanitaria de los mismos” (which establishes the quality standards for healthcare centres, services and institutions of the Region of Extremadura and the standardized model for the application for the healthcare quality accreditation). Ministry of Health and Consumer Affairs of the Region of Extremadura.

nor standards for the accreditations of this kind of assistance and there is not even a reference on the list of the types of purveyors¹⁰.

The Joint Commission does not either have a specific regulation for DH.

2.2.2 United Kingdom

The National Health Service (NHS) has a Guide for DH which deals with physical structure and facilities as well as with processes and procedures. The Health Building Note 52 “Accommodation for day care”¹¹, applies both to the design of new buildings and to the adaptation or extension of current buildings within general hospitals. This guide provides recommendations on general design and operation, patient flow, equipment, premises, areas, facilities and engineering. It also provides an annex with a bound of activities (service portfolio), assembled by specialities, which may benefit from DH.

2.2.3 Canada

The Ministry of Health of Canada reviewed in 1984 the guidelines on DH which had been published in 1975¹². These guidelines include features related to workload; bed requirement and recommendations about their distribution; patient management; human resources; functional program; equipment and relation with other services. It also incorporates a catalogue of diagnostic and therapeutic procedures which may be conducted in this type of units.

2.3 Experience in Spain and abroad.

The first analytic approaches to DHUs as a healthcare specific resource recorded in Spain are a 1979 publication by I. Aragón¹³ and a 1985 monograph report by S. Erill y J. Estapé¹⁴.

Erill and Estapé make a reference on the introduction to the origins of this healthcare modality in our country, as well as to the pioneer character of oncologic Day Hospital Units: *“Though the concept of Day Hospitalization has existed for nearly the last fifty years, its development and*

implementation in Spain is still limited. In fact, the intolerance to the antineoplastic chemotherapy, which is nowadays used with great success, has promoted the creation of some Day Hospital units which have developed, among many other things, into a renewed interest towards this healthcare modality. Spreading from completely different premises, psychiatric Day Hospital Units have come forth and, in other specialities, the interest of many professionals towards other less explored strategies of therapeutic optimization may be felt?

J. Sauret in 1994¹⁵ makes other relevant contribution. His publication “Hospitales de día ¿generales o especializados?” (“Day Hospitals, general or specialized?”) already deals with one of the topics which has been more vividly discussed: are DHUs dedicated only to attending one type of disease (i.e.: oncologic, haematologic, patients suffering from IHV/AIDS) preferable to polyvalent Day Hospital Units (medical DHU, medical-surgical DHU)? There are several examples of all types and, so far, no study that may establish which one has greater efficiency has been conducted.

In 1998, the Secretary of the National Plan for AIDS commissioned a group of experts to prepare a report on DHUs as a healthcare resource for patients infected with IHV/AIDS⁴. This report, though it only deals with the attention to this type of patients, proves the organizational and healthcare advantages of DHUs and the absence of data relating to the analysis of clinical and healthcare as well as cost-utility benefits.

A report conducted in 2004² by a working group from the Internal Medicine departments of several hospitals in Catalonia, provides some figures about the use of DH on the Spanish National Health System (Table 2.2). The ratio of discharges at conventional hospitalization /DH shows, on this report, a relation of nearly 5/1. It also displays a significant increase on the number of DH sessions on a short period of time (1999-2002). Oncologic processes sum nearly a fourth of the total, followed by the healthcare procedures to patients suffering from IHV/AIDS. There is a considerable downward trend on this type of patient, in accordance with the epidemiologic evolution of the disease.

Table 2.2. Healthcare activity at DH and Stays in hospitalization wards in Catalonia. Comparison between 1999 and 2002².

	1999	2002	2002/1999	DH distribution of discharges 2002
N° of Stays in Hospital wards	747.482	847.175	13,34%	
N° of Sessions DH	111.317	171.367	53,95%	
% DH /CH	15%	20%	35,83%	
N° of DH discharges according to the kind of process.				
Chemo / Radiotherapy	27.218	39.399	44,75%	22,99%
IHV infection	12.992	7.385	-43,16%	4,31%
COPD	3.145	4.764	51,48%	2,78%
Schizophrenia	2.675	4.111	53,68%	2,40%
Diabetes Mellitus	2.079	4.045	94,56%	2,36%
Heart failure		1.640		0,96%

According to the data provided by the Statistics of Hospitals (ESSRI, in its Spanish acronym)¹⁶, in 2004 more than two million three hundred thousand patients were treated in DHUs of all types. 78% of the Day Hospital discharges were produced on public hospitals and one out of four patients belonged to geriatric or psychiatric DHU. Three out of four had a medical reason.

Table 2.3. Day Hospital sessions. Year 2004

Day Hospital Unit	Public		Private		Total
	N	%	n	%	
Geriatric	147.694	7,9%	356.112	67,8%	503.806
Psychiatric	341.981	18,4%	54.200	10,3%	396.181
Other	1.370.397	73,7%	114.624	21,8%	1.485.021
Total	1.860.072	100%	524.936	100%	2.385.008
	78,0%		22,0%		100%

Source: personal compilation from data obtained from the ESSRI 2004, Ministry of Health and Consumer Affairs.

On that same year there were 33.5 million of hospital stays in Spain, of which more than one third belonged to the Internal Medicine and medical specialities department. Therefore, there were 1.1 DHU medical sessions for each 10 medical stays.

Table 2.4. Relation of medical DHU sessions / Stays at Internal Medicine and Average Stay. Year 2004.

	<i>General</i>	<i>Other acute patients</i>	TOTAL	%
Internal medicine and other specialities	13.114.990	608.655	13.723.645	40,92%
Other specialities and services	18.535.598	1.281.986	19.817.584	59,08%
Total	31.650.588	1.890.641	33.541.229	100,00%
% Medical DH sessions / IM and MS stays				10,82%
Source: personal compilation from data obtained from the ESSRI 2004, Ministry of Health and Consumer Affairs.				

The Spanish Society of Medical Oncology (SEOM, in its Spanish acronym) has recently produced a reviewing work on Onco-Haematologic Day Hospital Units (O-HDHU) in Spain¹⁷, which includes a series of conclusions and recommendations relating to the structure and processes of those units.

The Spanish Society of Nursing Oncology holds a “Guía para la estandarización de cuidados en Hospital de Día Oncológico”¹⁸ (“Guide for the standardization of care at Oncologic Day Hospitals”), which does not make any reference to the structural aspects of DHUs, though it broadly deals with nursing care on those units.

On an international level, the WHO published a report in which DHUs were considered as a model for treating psychiatric patients¹⁹. The Cochrane Collaboration has conducted two meta-analytic efficiency based studies on DHU²⁰ as healthcare modality, though they just deal with geriatric and psychiatric DHUs. No similar studies on patients suffering from any medical pathologic episode have been found.

3 Patients' rights and guarantees.

Healthcare centres that have DHUs must observe and respect all the rights granted to patients in existing healthcare legislations. This chapter deals in detail with certain aspects related to the Information addressed to patients (their families and carers) on this kind of healthcare modality and, in general, with other legislative aspects to be taken into account on these units and, where appropriate, on the corresponding healthcare centres.

3.1 Information to patients and carers⁽⁸⁾.

Informed consent

As a general rule, the information provided to patients treated on DHU should be clear, concise and sufficient, including the following:

- Information on the general characteristics of the DHU.
- Detailed information on the DH pathologic, diagnostic and treatment procedures.
- Informed consent.
- Instructions and recommendations.

Most patients that attend these units suffer from chronic pathologies and they are accompanied by a carer. Day Hospitalization should disturb as little as possible everyday activities of both patient and carer. The information provided should include all aspects that may ease the work of carers and that may promote their active involvement on the caring process.

⁽⁸⁾ Relatives or escorts acquire additional relevance on their role as carers. For the positive evolution of many DH patients, it is very important the active and informed involvement of the carer, which means that he/she has to be trained and informed. Carers are, at the same time, a healthcare resource and a client of the unit.

3.1.1 Information on general characteristics of the DHU

It is highly recommended that the welcoming information (leaflet, booklet) should **include**, at least, **a description of the different stages the patient will go through as well as special recommendations and warnings**. Inclusion of photographs of the DHU may help patients understand and accept this kind of healthcare procedures.

A shortened version of this document could be distributed in admission areas, waiting rooms and healthcare centres, so that the general public may be aware of this type of healthcare modality and of the units available on its area.

3.1.2 Detailed information about the pathologic process and the diagnosis and caring procedures on DHUs.

The information provided to patients will be procedure-specific and should include:

- Basic explanations of the pathology that has developed into this kind of healthcare care.
- Basic explanations about the diagnostic and caring procedures at the DHU.

3.1.3 Informed consent.

Invasive diagnostic or therapeutic procedures, as well as treatments that may imply risks or a clear and foreseeable adverse impact on patients' health must have a written informed consent of the patients, as stated by law⁽⁹⁾.

⁽⁹⁾ There will be a written informed consent on the following cases: surgical procedures, invasive diagnostic and therapeutic procedures and, in general, any other procedure that may imply a risk or a clear and foreseeable adverse impact on the patient's health". Art. 8.2. of Act 88/2002 on "Autonomía del Paciente y de Derechos y Obligaciones en Materia de Información y Documentación Clínica" (Patient Autonomy and Rights and Obligations regarding Clinical Documentation and Information).

DHU should have an informed consent form for each procedure included on their service portfolio.

3.1.4 Instructions and recommendations

Patients should receive the following written information:

- Prior instructions to admittance to DHU.
- Instructions for access to DHU.
- Instructions for immediate post-operative stage.
- Instructions for the stay of the patient, carers and escorts at the DHU.
- Post-discharge procedure-specific instructions. The information must include all possible incidents that patients may experience in their homes or alternative accommodations. It has to be accompanied by the medication and/or treatment to be administered and by a contact phone number to call in the event of any doubts.
- Information on access to continued care resources connected to the DHU/ Hospital.

3.2 Ensuring patients' rights

Healthcare centres and institutions that have DHU should have the following information and procedures available, in addition to the more specific information indicated above:

- a) Service portfolio.
- b) Reception programme.
- c) Code of ethics.
- d) Clinical practice guides, pathways or protocols.
- e) Clinical trials procedures and protocols.
- f) Clinical records.
- g) Living wills (advanced directives).
- h) Medical discharge reports.
- i) Protocols that may ensure the safety, confidentiality and legal access to patient data.
- j) Complaints and suggestions forms.
- k) Liability insurance policy.
- l) Price list.

All patients or relatives by family or fact should have guaranteed right to access to these documents, in accordance with the corresponding legislation, except for those indicated in points d), e) or i).

Below there is more detailed information on some aspects of these rights. Points a) Service portfolio, f) Clinical records and h) Medical discharge reports will be discussed in Chapter 5 “Organization and management”

b) Reception programme.

Hospitals should have a reception programme for inpatients. DHU may have a reception programme for its patients which will include the general information included in sections 3.1.1, 3.1.2 and 3.1.4 as well as the information included on the above mentioned list of patients’ rights and obligations.

c) Code of ethics.

Healthcare centres that have DHUs shall have a specific code of ethics which will include the rules and principles to guide their activity, in line with professional deontology.

d) Clinical practice guides, pathways or protocols.

DHUs shall have demonstrable evidence of the clinical practice guides or protocols they use in the healthcare services they are authorized to provide, together with the evaluations and, where appropriate, modifications and adaptations.

e) Clinical trial procedures and protocols.

All clinical trials must comply with the conditions and guarantees established in their correspondent legislation.

j) Complaints and suggestions forms.

1. Healthcare centres that have DHU will have complaints and suggestion forms available to allow users to record any complaints, claims, initiatives or suggestions they may wish to communicate in relation to the operation of the units.

2. Signs indicating the existence of these forms will be clearly located and the forms will be easily available to allow their identification and use.
3. DHU users are entitled to receive written replies from the Unit manager or any other authorized person to the complaints posted, besides their referral to the competent authority, in accordance with the provisions of regional applicable legislation.
4. All complaints, claims, initiatives and suggestions should be periodically reviewed.

k) Liability insurance policy.

1. All healthcare professionals working in the private sector and all private bodies or corporate persons providing healthcare services of any kind must have the mandatory liability insurance or financial guarantee to meet any compensation claims that may derive from eventual harm caused to persons as a result of these services.
2. Healthcare private centres that have DHU must have the necessary liability insurance policy to cover any possible compensation to harm caused to patients.
3. Centres and, where appropriate, independent healthcare professionals should keep a copy of the supporting documents of the mandatory liability guarantees.

l) Price list.

Healthcare centres that have DHUs must have price lists available to users; these lists must also be notified to the competent authorities in accordance with the applicable legislation in this matter.

4 Patient's safety

This chapter deals with patient's safety criteria and guidance in DHU.

4.1 Nosocomial infections

1. DHUs shall have nosocomial infections control and prevention programs, adapted to their specific characteristics and activities which will ensure that patients at risk and risky procedures are identified.
2. To this effect, a protocol shall be set up, which will include aspects related to hand hygiene, use of alcohol-based cleansers, antiseptics, surgical antibiotic prophylaxis, prevention and handling of incidents related to exposure to blood and risk of infection in invasive procedures. This protocol should be periodically reviewed.
3. DHUs must be able to demonstrate the ability to effectively comply with this obligation.
4. DHUs should periodically review the application of the implementation of protocols of nosocomial infections prevention.

4.2 Epidemiological alerts

Healthcare centres that have DHUs shall have epidemiological alert systems connected to the corresponding health authorities.

4.3 Medication handling

1. DHUs, and specially O-HDHUs must have procedures for storage, packaging, identification, handling and prescription of drugs, with special emphasis on high handling and administration risk medicines, and on control of use-by dates.
2. Healthcare centres that have DHU shall comply with the specific requirements established by the drug legislation.

4.4 Haemoderivatives handling

Handling and security of haemoderivatives is the exclusive competence of the blood bank, and it must be accredited for it⁽¹⁰⁾.

4.5 Patient identification

1. Healthcare centres with DHU must have a reliable system of patient identification.
2. This system shall allow patient identification prior to any risky procedure, to the administration of any medication or haemoderivatives, and prior to any diagnostic procedure.

4.6 Safety management

1. Healthcare centres with DHU must ensure that all patient safety, quality, technological adaptation and risk management measures are duly obeyed.
2. All C.1 centres (hospitals) as defined in Royal Decree 1277/2003 (October 10th, 2003) shall have a commission or unit, when appropriate, responsible for identifying and recording any adverse events that may occur as a result of the healthcare modality provided, and for applying and assessing on any steps to be taken towards resolving or improving the situation.

4.7 Emergency procedures.

1. Healthcare centres with DHU must have an Emergency Plan that should establish the organization of human and material resources available for the prevention of fire or equivalent risks and which

⁽¹⁰⁾Royal Decree 1088/2005, September 16th, "por el que se establecen los requisitos técnicos y condiciones mínimas de la hemodonación y de los centros y servicios de transfusión" (establishing the technical requirements and the minimum conditions for haemodonation and for the transfusion centres and services) and Royal Decree 1301/2006, November 10th, "por el que se establecen las normas de calidad y seguridad para la donación, la obtención, la evaluación, el procesamiento, la preservación, el almacenamiento y la distribución de células y tejidos humanos" (establishing the quality and safety regulations for the donation, procurement, evaluation, processing, preservation, storage and distribution of human cells and tissues).

guarantees immediate action and evacuation in the event of a disaster occurring within or in the vicinity of the premises.

2. This Emergency Plan shall include risk assessment, protection measures, emergency drills and implementation and review measures.

5 Organization and management of DHU

Day Hospital Units (DHU) are defined as organizations of medical professionals providing multidisciplinary healthcare via Day Hospitalization procedures, in conformity with a series of functional, structural and organizational requisites that ensure the quality and efficiency conditions needed to carry out this activity. As mentioned before, the main activity of DHU is providing specific care to patients under Day Hospitalization, with specific resources and a Unit manager.

This chapter deals with the criteria and guidance tips for the organizational aspects of DHUs: types of DHUs, admission to DHUs, service portfolio, patient management, patient inclusion criteria, organization and management of the unit and aspects relating to patient management.

5.1 Types of DHUs.

In general, it could be stated that the traditional “Medical-Surgical Day Hospital Unit”, which concentrates all Day Hospital activity of the acute general hospital, has moved into a broader configuration derived from trend to become specialized on a specific type of patients.

This specialization becomes clear on DHUs such as the Onco-Haematologic or those treating HIV/AIDS patients. This specialization is possible as far as the volume of activity and, thus, the resource sizing of the new unit allow it.

Table 5.1. Day Hospitalization Unit types.

Polyvalent	Specialized
Medical-Surgical Day Hospital Unit.	Onco-Haematologic Day Hospital Unit.
Medical Polyvalent Day Hospital Unit.	Day Hospital Unit for patients infected with HIV/AIDS.

5.1.1. Polyvalent DHUs.

Polyvalent DHUs are those units which have their own entity within the management structure of healthcare centres, which have their own manager and which are devoted to general procedures such as aspirations, biopsies, blood extractions, first aid, drainages, intravenous perfusions and others (see below “service portfolio”) to patients with different diseases and included on different healthcare procedures and coming from diverse medical (recovery from an endoscopy) or surgical (post-recovery) procedures.

These units are considered autonomous as their main activity is to provide healthcare to patients coming from other hospital units and are, from an analytic accounting point of view, intermediate units that work for other services that divert them patients. Most patients come directly from their homes though, in some cases, DHUs treat patients coming from other units within the same healthcare centre.

As far as the so call pluripathologic^{23,24} units or the medical examination and treatment units (for endoscopies or haematologic treatments) provide DH treatment, the number of places at Polyvalent Medical Day Hospital Units decreases. Therefore, there is a trade off among places of DH integrated in other units and places included in Polyvalent Medical Day Hospital Units.

There are several approaches to setting the sizing of polyvalent or specialized DHU according to their volume of activity, and hospital organization and management. In general, if the workload allows it, it is highly recommended:

- **To establish a DH specific area (post-recovery) linked to Day Surgery²², discriminated from polyvalent medical DHU.**
- **To establish a DH specific area (post-recovery) linked to medical investigation and treatment units (endoscopies, haematologic treatment, etc) assisted by nursing staff trained for the special procedures conducted on these kind of resources and who, generally, are in charge of patients during the procedure and the recovery time.**

Table 5.2. displays the characteristics of polyvalent DHU against DH integrated into medical investigation and treatment units, being the later the reason for the second recommendation.

Table 5.2. Characteristics of medical polyvalent DHU and integrated DHU

	Polyvalent medical DHU	DHU integrated into medical investigation and treatment units for endoscopies, haemodynamic treatments, DS, etc.
Appointment	No need of scheduled appointment.	Scheduled appointment.
Clinical procedures	Might be unknown until the healthcare act.	Predetermined
Average time of the healthcare procedure at the unit.	Unknown for many patients.	Most patients are aware of it.
Number of healthcare acts by episode.	Generally several for a long period of time.	One generally.

5.1.2. Specialized DHUs.

Within this category it may be included those units that deal with a specific set of processes (onco-haematologic or those for treating patients suffering from IHV/AIDS, for example).

Though polyvalent medical DHU and Onco-Haematologic Day Hospital Units share some characteristics, as structural and functional ones, or those relating to the guarantees or the patients' safety, there are clear differences relating to organization and management. Annex 2 includes an outline on how activity at O-HDHUs is managed according to the especial needs of its patients and to the specific procedural situation that they require.

According to the volume of activity, organization and management of hospitals, there are several approaches to the sizing of polyvalent or specialized DHUs. In general, if the workload allows it, it is highly recommended:

- **To make a difference between polyvalent medical DHU and Onco-Haematologic DHU.** This recommendation is based mainly on:
 - The oncologic patient means, nowadays, 80% of the workload of healthcare units.
 - It is a kind of patient with a clearly defined profile of care needs, as well as affective and environment relations with the staff and his/her carers.
 - Patient management at O-HDHU is generally based on a scheduled basis while polyvalent medical DHU deal frequently with non scheduled attention.

The above recommendation is subject to the resource sizing of the unit related to its workload estimation which, at the same time, is conditioned by the assigned area of reference to the hospital (see Annex 4: “Resource sizing”).

Those centres which handle a high volume of patients³ may consider detaching a DHU for patients suffering from IHV/AIDS (o for infectious patients in general). However, the decrease on the number of cases, the good response to treatment and the quality of life of these patients under current therapeutic treatment make this option inadvisable for most general acute hospitals.

On the other side, there are structural determining factors, among them the organizational and management structure of the hospital and, above all, its human resources organization.

5.2 Relation with other healthcare units and levels.

Most patients that attend DHU come directly from their homes, either to a scheduled or to an urgent consultation, and after the prescription of the responsible doctor. In some cases inpatients from conventional hospitalization are treated at DHUs.

On the follow-up, a series of organizational and management alternatives are presented for handling patients; each healthcare institution, and each DHU should prioritize the alternatives that are more appropriate to this organizational and management modality. This report recommends those organizational and managing possibilities which respond to the following criteria:

- **To promote the role of General Practitioners.** DHU must take part on the longitudinal follow-up of the patient in order to provide him/her with the attention he/she may need on the most appropriate environment (home, primary healthcare, specialized surgery, day units, conventional hospitalization, A&E) and with the most suitable resources (personal or technological). Therefore, there must be a real and effective coordination between the General Practitioner of the patient and the specialized doctor (or, when appropriate, any other professional working as "patient manager").
- **To take advantage of IT systems to prevent unnecessary trips for patients** (agenda management) or repetition of additional tests (single clinical records), etc.
- **To avoid patients suitable for DHU may be treated in other healthcare resources,** as conventional hospitalization or A&E services, which are less adequate from a clinical efficiency and attention quality perspective.
- **To develop social and health coordination programmes at the healthcare centre,** which will allow not only identifying the users' needs, but also to update and introduce necessary improvements. A great number of DH patients can potentially benefit from this cross-sector coordination.

5.3 Service portfolio.

Service portfolios are defined by the range of surgical procedures each DHU performs. Annex 1 includes a list of these procedures.

5.4 DHU patient flow.

Patient flow at Polyvalent medical DHUs is performed in accordance with the sequence shown at Table 5.3. and according to the following organizational and management criteria:

- a) Admission to DHU.

The key objective is to make DH available to all patients that are suitable for it.

Patients may be admitted to polyvalent medical DHU via Primary Healthcare or via specialized healthcare:

1. **Primary healthcare.** Primary healthcare professionals may send patients, on a strict coordination basis, to DHU to non scheduled consultation avoiding the patient, when required, going through A&E services.
2. **Specialized healthcare.** The clinical manager of patients at healthcare services may send patients to DHU under scheduled consultations (scheduled chemotherapy sessions, for example) or even to non scheduled consultations (in agreement with the general practitioner of the patient, from outpatient consultations, medical treatment or investigation units for additional procedures or A&E services).

Requests should be efficiently managed so as to make the most profitable use of the available resources, reconciling patients with scheduled consultation with those who may attend the unit with no margin for schedule, regardless the service they may come from. Centres should assess the suitability to assign specific resources to those patients with no scheduled consultation. It is not possible to provide, generally speaking,

further recommendation regarding the best organizational solution for healthcare assistance, according to the criteria provided above.

b) Attention at DHU.

DHU will provide the procedures defined on its service portfolio (Annex 1) and the post-recovery care. Moreover, patients who have undergone any procedure in other medical treatment or investigation units (endoscopies, day surgery) may be treated on DH for post-recovery. Procedures have to be protocolled and consented.

c) DHU discharge.

Most patients will be discharged from DH before completing a stay⁽¹¹⁾. The discharge criteria must be established. The alternatives offered to patients after procedures will basically depend on his/her clinical condition. Patients will generally be sent home – or, where appropriate, to alternative accommodation, like a hotel – with only a small percentage of cases needing extended specific care that may imply admission to a hospital ward.

Satisfaction surveys are advisable so as to know the patient acceptance and satisfaction with the method as well as to identify any possible service problem.

Table 5.3. DHU patient flow.

Sequence	Location	Action	Requisites
Referral	<ul style="list-style-type: none"> From primary healthcare. From specialized care (consultations, A&E services). 	<ul style="list-style-type: none"> Scheduled by the clinical manager of the patient. Non scheduled, on request of the clinical manager of the patient or in coordination with the General Practitioner of the patient 	<ul style="list-style-type: none"> To avoid the patient being hospitalized in conventional units or sent to A&E services. Primary healthcare coordination - Specialized care.

⁽¹¹⁾ Being "stay" considered as an overnight stay (patient checked in at 00:00) on a conventional hospitalization unit.

Sequence	Location	Action	Requisites
TO	DAY HOSPITAL UNIT		
Admission	<ul style="list-style-type: none"> DH Administrative area. 	<ul style="list-style-type: none"> Patient identification ⁽¹²⁾. Evaluation of the carer's needs⁽¹³⁾. Patient activity. Confirmation of appointment and process / procedure. Confirmation (when appropriate) of remission and process / procedure. Patient resource allocation. 	<ul style="list-style-type: none"> To guarantee resource availability to those patients admitted to the unit without previous appointment (non scheduled).
Consultation (if necessary)	<ul style="list-style-type: none"> Specific DHU consultation room. 	<ul style="list-style-type: none"> Clinical assessment and indication. Information to patients and relatives. Informed consent (if appropriate). Additional tests⁽¹⁴⁾. 	<ul style="list-style-type: none"> Comfort. Selection criteria. Single clinical records. Spoken and written information.
Admission to box / room	<ul style="list-style-type: none"> Day hospital area. 	<ul style="list-style-type: none"> Procedures. Recovery. Contact with carer. Comprehensive monitoring of the patient Care of relative / carer. Fulfillment of post-discharge safety criteria. Early assessment of possible future complications. Instructions for patient and carer upon discharge. Discharge or hospital admission if necessary. Check-up: DH date and time appointment, or primary healthcare consultation or specialist clinic. 	<ul style="list-style-type: none"> Comfort. Strict safety criteria upon discharge. Precise post-discharge instructions. Clear definition of post-DH care. Determination of responsibilities for care.

(12) Patient identification by means of a safe system, as an ID bracelet.

(13) Study the carer's needs (certificate of stay, possibility to use electric devices, etc.)

(14) Patients should not have to return for further tests; they should be performed on the day same of his assessment-selection, avoiding unnecessary trips.

Sequence	Location	Action	Requisites
Procedures / Minor surgery room (if needed)	Minor surgery room.	Procedure.	
TO	HOME		
Home (or alternative accommodation)	<ul style="list-style-type: none"> • Patient's home. • Alternative home (short-stay facility or patient hotel; assisted short-stay facility). 	<ul style="list-style-type: none"> • Primary healthcare or specialist clinic professional follow-up. 	<ul style="list-style-type: none"> • Primary healthcare coordination - Specialized care.
Follow-up	<ul style="list-style-type: none"> • DH / Primary healthcare / consultation room. 		<ul style="list-style-type: none"> • Achievement of patient satisfaction. • Monitoring of evaluation, control and patient follow-up.

5.5 Essential organizational DHU requisites.

The following considerations are considered essential:

- **Availability of an organization and operation manual.**
- **Strict protocol observance and clear definition of responsibility chains.**
- **Comprehensive information to the patient and to the relatives/carers**, and, where appropriate, informed consent which will be produced under the terms of the legislation in force.
- **Adequate treatment** to both patients and carers.

- **Working timetable and operating scheduled so that it may minimize hospital admissions due to administrative problems** (late discharges, weekend or bank holiday closures, etc.)
- **Direct responsibility of the DHU throughout the process** even though other healthcare organizations may provide specific support (primary healthcare, A&E services, conventional hospital units, etc.).
- **Strict compliance with discharge criteria.**
- **Detailed explanation of post-discharge care.**
- Implementation of an appropriate IT system **to monitor results.**

5.6 Management structure

All DHUs need a specific Management structure. A member of the staff should assume the role of Unit Quality Manager.

At least, one experienced administrative assistant will be required to provide support to the DHU managers and to handle admissions and waiting lists.

Reporting lines of DHU staff members should be clearly defined when they belong to multiple departments.

5.7 Organization and operation manual.

DHU should have an organization and operation manual containing:

- a) Organizational chart of the unit.
- b) Details of the physical layout of the unit and its structural resources and equipment.
- c) Regulations manual.
- d) Service portfolio.

The manual must respect the general organizational requisites described above. It should be open and subject to review and update, incorporating any changes made in the service portfolio or when required by any structural and functional changes.

a) Organizational chart.

There has to be a DHU manager. Responsibilities, hierarchies, tasks and competences of each of the DHU staff members should be clearly defined. If the DHU manager is a doctor, there will be as well a nursing manager.

The doctor that prescribes the admission and procedures that the patient has to undergo will be his/her clinical manager.

Functional interference with other organizational structures (clinical services, administrative services, etc.) should be avoided, by clearly defining DHU staff reporting chains when they belong to multiple departments.

b) Physical layout.

The organization and operation manual should include details of the physical layout of the DHU and its relationship with other areas of the hospital, as well as a description of the structural resources of the DHU and equipment available.

c) Regulations manual

DHU must have a regulations manual adapted to their organizational requisites that orderly describes each stage of the care process, the necessary protocols and the reporting chains in each action of the healthcare process.

Table 5.4 “Healthcare regulations” summarizes the relation between patients’ attention and the structural requisites, protocols and staff that take part on the care process, following the patient flow scheme described in Table 5.3.

Table 5.4. Healthcare Regulations

Action	Structural requisites	Protocols	Staff
Admission to DHU <ul style="list-style-type: none"> • Confirmation of appointment, patient identity and process. • Confirmation of referral (non scheduled patients). 	<ul style="list-style-type: none"> • Dedicated admission area. • Reception area. General waiting area (comfortable and separate from hospitalization area).	<ul style="list-style-type: none"> • Patient resource allocation. 	<ul style="list-style-type: none"> • Administrative assistant. • Nursing staff.
General preparation <ul style="list-style-type: none"> • Confirmation that instructions have been met. • Safekeeping of personal belongings. 	Separate toilets and changing rooms <ul style="list-style-type: none"> • Toilet and changing room. • Lockers for storage of personal belongings. 	<ul style="list-style-type: none"> • Pre-operative preparation (confirmation). 	<ul style="list-style-type: none"> • Nursing staff.
Procedure	DH chairs/beds, or when needed, special premises (minor surgery room, medical investigation and treatment units, etc.).	<ul style="list-style-type: none"> • Procedure protocol. 	<ul style="list-style-type: none"> • Doctor. • Nursing staff.
Recovery	DHU recovery area (chairs / beds).	<ul style="list-style-type: none"> • Generic pre-discharge safety protocol: • Awake and oriented. • Vital signs. • Other (pain control, drainage, etc.). 	<ul style="list-style-type: none"> • Nursing staff.
Decision on discharge or overnight stay <ul style="list-style-type: none"> • Surgeon assessment. • Post-discharge instructions. 	Recovery area	<ul style="list-style-type: none"> • Discharge criteria. • Post-discharge instructions. • Definition of post-discharge follow-up (recommendations to General Practitioner and nursing staff). 	<ul style="list-style-type: none"> • Doctor. • Nursing staff.

Table 5.5. “Administrative regulations” sums up the relation between the DHU administrative attention and the organizational requisites, procedures and staff that take part on the care process.

Table 5.5. DHU administrative regulations.

Activities	Structural requisites	Procedures	Staff
<ul style="list-style-type: none"> • Handling of medication. • Handling of healthcare materials and other necessary items for the unit operation. • Billing. • Accounting. • IT system. 	<ul style="list-style-type: none"> • Pharmacy (at DHU - specific premises at O-HDHU-, or storeroom and central pharmacy). • General and pharmaceutical products storeroom. • IT system. 	<ul style="list-style-type: none"> • Recording of personal details and insurance details. • General and cost accounting. • Purchasing and ordering of material (supply agreements). • Social - administrative discharge protocol⁽¹⁵⁾. • Billing and collection of payment. 	<ul style="list-style-type: none"> • Administrative assistance. • Hospital Pharmacy staff. • Patient manager - Social worker. • Nursing staff manager.

d) Service portfolio

The regulations manual will provide a list of the procedures included in the unit service portfolio.

5.8 Patient management

5.8.1 Admission

Admission will be part of the general admission procedures of the centre. However, activities and functions related to it should be, ideally, performed

⁽¹⁵⁾ Request of an ambulance, reports and other prescriptions, certificates of stay, etc., should be foreseen - when possible - at the patient admission to DHU.

by the administrative support units. All aspects relating to the clinical records, patient records, discharge report and data protection belong to the general hospital the DHU is related to.

5.8.2 Documentation and clinical record

Clinical documentation refers to the documents resultant from the care process, regardless their format or medium. It includes, inter alia: patient clinical records, informed consent, prior instructions, where appropriate, and hospitalization, transfer and medical discharge reports.

Clinical documentation will be handled by the admission and clinical documentation unit or equivalent. Handling will involve creation, safekeeping, lending, copying, follow-up and processing of any clinical document.

Clinical documentation must be kept so as to ensure a correct and safe condition for an appropriate period of time, and at least for five years from the date of completion of the corresponding care process.

5.8.2.1 Clinical records.

All patients must have individual clinical records which will be shared between medical staff, centres and healthcare units. Moreover, they should meet the technical compatibility requirements established by each Regional Health Authority.

Clinical records may be in paper, digital, electronic or telematic format; they must guarantee complete access to all information at all times. As far as the design, minimum content, requisites, guarantees and uses of clinical records are concerned, the provisions of the Act 41/2002 (November 14th) on “Autonomía del Paciente y de Derechos y Obligaciones en Materia de Información y Documentación Clínica” (Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information) shall apply.

Each healthcare centre must have a unique clinical record register which will centralize all the data of the activities conducted in that centre. This register will be managed in accordance with a protocol that guarantees that the information can be traced and located and that it includes written criteria on document filing, safekeeping and access.

In some cases⁽¹⁶⁾, healthcare episode repetitions on a short period of time may complicate clinical record management, causing frequent and little functional record transfers. A possible exclusively logistic solution could be the provisional storage at the DHU of the clinical records of those patients under these circumstances provided that: 1. the unity of the clinical record is respected, 2. its management is centralized under the responsibility of the central archive and 3. the record is available for any other hospital service or unit that may need it on the same conditions of other records.

5.8.2.2 Patient register

The patient register shall contain all the necessary data to ensure the correct identification of the patient, the corresponding care process and the insurance information. At least, these minimum data should be recorded:

- Identification of hospital or healthcare centre.
- Identification of patient (full name).
- Date of birth.
- Sex.
- Address.
- Insurance and, when appropriate, medical card number.
- Date of admission and provision care.
- Circumstances of admission or of care provision.
- Process.
- Procedure.
- Date and, when appropriate, destination of transfer.
- Date of medical discharge.
- Circumstances of discharge.
- Identification of doctor signing discharge report.

5.8.2.3 Discharge report.

Upon completion of the care process or transfer to another healthcare centre, patients or, when appropriate, carer or relative, are entitled to receive from the DHU the medical discharge report contemplated in the “Ley Reguladora de la Autonomía del Paciente y de Derechos y Obligaciones en Materia de Información y Documentación Clínica” (Act on

⁽¹⁶⁾ As in O-HDHU with conventional clinical records (in paper format), as the computerization of the record provides a complete solution to this problem, among many other advantages.

Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information)⁽¹⁷⁾.

5.8.3 Health data protection

5.8.3.1 Obligations and rights

Personal data related to patient health are classified as special protected data in contemplation of the Organic Law 15/1999, December 13th, on “Protección de Datos de Carácter Personal” (Personal Data Protection).

Healthcare centres shall take all the organizational, procedural and technical measures necessary to guarantee the safety, confidentiality and integrity of all data regarding patient health, and to facilitate exercise of the right to access, rectification and cancellation of such information.

5.8.3.2 File manager

All centres and institutions shall ensure that all files, automated or not, are kept safely and in good condition.

All healthcare centres shall designate a file manager to be in charge of automated files, appointment which will be notified to the corresponding authorities. The file manager as well as all those involved at any point with the processing of patient data shall comply with the professional secrecy rule.

5.8.3.3 Data confidentiality

All patients are entitled to confidentiality about their health state, according to the provisions of the “Ley Reguladora de la Autonomía del Paciente y de Derechos y Obligaciones en Materia de Información y Documentación Clínica” (Act on Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information).

(17) Single transitory provision. Discharge report. "Discharge reports shall be governed by the provisions of the Ministerial Order of the Ministry of Health of September 6th 1984, until the provisions of article 20 of this present law are developed".

5.8.3.4 Data transfer.

Any transfer of patient data needs the express content of the people involved with the exemptions contained in the health and data protection legislation.

5.9 IT system

IT system will be part of the hospital general IT system and it should meet the DHU requirements:

Patient management:

- - Personal details.
 - Appointment.
 - Admission.
 - Discharge and coding.
 -

Unlike conventional hospitalization activity or day surgery, there is not, at the Spanish National Healthcare System, a universal coding system for the processes conducted at DHU. The Andalusian Health Service codifies DH activities under the CMBD (coding minimum basic dataset)⁽¹⁸⁾.

It is highly recommended the development of a unique DH activity codifying and registry database system for the Spanish National Health System, including private hospitals.

- Clinical record management.
- Clinic workstation:
 - Electronic patient record.
 - Departmental applications (Laboratory, Medical Image Diagnosis,...)

⁽¹⁸⁾ Andalusian Health System. General Directorate for Health Assistance. E.A. section - Health system management. "Manual de Instrucciones del C.M.B.D. Hospitalización, Hospital de Día Quirúrgico y Hospital de Día Médico" (Instructions manual of the C.M.B.D. Hospitalization, Day Surgery, Medical Day Hospital). Andalusia 2007.

- Economic and administrative general services management⁽¹⁹⁾:
 - Storeroom (supply agreements, inventory management, purchase orders, etc.).
 - Pharmacy (electronic prescription system; unit-doses).
 - Accounting.
 - Sterilization.
 - HR management (short-term disabilities, incidents, leaves, substitutions, etc.).

- Assessment (management):
 - Costs per procedure (cost accounting).
 - Satisfaction surveys.
 - Activity indicators.
 - Quality indicators.
 - Performance indicators.

⁽¹⁹⁾ Economic-administrative management will be centralized, though some administrative procedures will be performed at the DHU

6 Physical structure and material resources of DHU

6.1 Functional design programme

Each DHU should have defined a functional design programme and a management structure according to the types described on chapter 5.

Functional design programme should take into account future development needs criteria of the treatments provided under this healthcare modality, including:

- Demographic analysis of the surrounding area (with special reference to the patient source area and patient selection criteria).
- Study of theoretical ambulatory demand, considering the procedures included in Annex 1. The unit's market penetration capacity once it is fully operational should be taken into account.
- Analysis of the premises that would house the DHU (design of new buildings or alteration of the existing ones).
- Analysis of the production capacity in high and low efficiency scenarios.
- Study of the unit requirements in terms of human and material resources, depending on demand, estimated activity levels and hospital service portfolio.
- Description of the unit's operation based on the regulations manual, including patients, personnel, relatives and materials flow charts.
- Definition of the unit's care circuit (patient admission, administrative proceedings for their reception, movements within the unit, alternatives upon discharge, etc.), forms of post-discharge medical care and functional relations with other units (central services, A&E services, critical care unit, primary healthcare, etc.).

- The functional design programme will be developed in accordance with the specific organizational characteristics of each unit.
- Viability economic study which will include the budget foreseen for the investment on infrastructures and equipment as well as the estimation of the expenses on staff, supplies and maintenance of the unit activities. It will also include the economic and healthcare impact of the unit on the healthcare organization on which it depends.

6.1.1 General remarks.

The aim of the functional design programme is to create and appropriate specific environment which will respond to the characteristics of the patients treated at the unit and the procedures they must follow, with equipments and facilities adequate to its service portfolio and which may allow scheduling so as to optimize attention.

In DHUs most patients are admitted, treated and discharged at the Day Hospital Unit, though it may provide support to patients from other units for specific procedures. DHU is exclusively aimed for medical treatment, and thus it should not be used for drainage of patients from other hospital services, and, under no circumstances, for overnight stays of its own patients, who may experience complications preventing discharge or even for inpatients in cases of bed shortage at polyvalent hospital wards.

DHU characteristic activities may be differently performed, though always fulfilling two essential requirements: the need of appropriated premises for treatment and a specific area for pre-discharge recovery.

DHU functional design programme will consider the different resources appropriate for procedures: consultation room, places for beds or reclining chairs or rooms for specific treatments. Recovery will take place in premises in a common ward with place for beds or reclining chairs.

There is a whole range of possibilities; diagnosis, treatment and recovery may be performed on the same premises or in different areas: examination and diagnosis may take place on the consultation room, treatment on a reclining chair and recovery at an observation ward.

Units for treatment or observation will include beds or chairs, which may be arranged in individual rooms or in common wards, according to the needs of each patient and/or treatment. Moreover, there will be places for standard procedures and for special procedures, distinguished by the facilities and the equipment required for each procedure.

DH basic unit type, where patients may receive treatment or recover from it before being discharged, will be generically called DH area.

The functional design programme will assure patients the appropriate privacy and dignity conditions, though attaching special importance to the environmental and functional conditions.

The characteristic activities of the unit require four main premises, arranged on the following order:

- Reception, which includes the waiting rooms and the admission area.
- DH area, which comprises the healthcare premises for consultation, examination, treatment and recovery.
- Nurse station and general utility rooms.
- Administrative area and staff rooms.

The structural design program should allow, whichever the healthcare procedure, constant flow between the healthcare premises, as there will be patients which will be able to move around on foot and on their own, or in a wheelchair or bed accompanied by healthcare staff, depending on their general condition or if they are under sedation or not.

Moreover it will allow the flow among the DHU and the additional hospital healthcare areas and utility rooms, according to the functional relations existing among them.

Staff and equipment should move easily around the unit. Main flows should be planned in order to minimize motility and to avoid, when possible, interferences and loss of time.

Location requirements of DHUs at general hospitals are settled by the

need to provide easy access to the unit for patients and their escorts, staff and the necessary equipment. Patients and escorts should have access to the unit from the outside, and they would not have to go through other areas of the hospital. DHU should be ideally located at the entrance level and, in all cases, with good accessibility conditions to all kinds of users.

These units should be located at the ambulatory area of the hospital, allowing patients to enter through the outpatient consultation area. It should be placed by the central medical investigation and treatment units.

6.1.2 DHU structural aspects.

DHUs require a series of structural and equipment resources which will depend basically on the characteristics of the clinical scheduled activity and on the autonomy degree they enjoy in relation with the existing resources of other units.

In the light of the growth and progress of Day Hospitalization, DHUs structural conditions should meet, when possible, the criteria and the recommendations established by this guide. This chapter provides general criteria while Annex 4 offers an “average” functional design programme for an autonomous Day Hospital Unit with 10 beds/chairs and an onco-haematologic unit with 20 beds/chairs.

To design a DHU, the functions and activities indicated earlier, in their order of appearance, should be considered:

- Entrance.
- Admission.
- Waiting rooms.
- Consultation rooms.
- Procedure.
- Recovery area.
- Discharge.

A description of the main structural and functional characteristics of the premises in which activities are developed is provided bellow; it is based on the ideal patient flow and on the procedures that DHU patients undergo.

This concept, outlined on the diagram bellow, should be the model of the architectural design of the unit. It will have to adapt to the premises although observing, when possible, the circulation flows, which are the basis of a well drawn up unit.

Figure 6.1. DHU sequence of activities.



Reception

This area is devoted to patients and escorts access as well as to reception and admission activities (included, when necessary, the discharge proceedings at the completion of the care process). It is also a waiting area for patients before treatment and, in some occasions, for escorts, during the treatment and recovery time prior to discharge.

This area will have the following physical structures:

- Entrance:
 - Patients and their escorts must find easily the entrance to the DHU when arriving to hospital. If there is direct entrance from the outside, it should be clearly signposted so that it can be easily identified.
 - It is highly recommended that the unit should be located on the same level as the entrance and as close as possible to it if it is shared with other services.
 - Signposting on the outside will ease access to the unit. Specific parking lots are advisable as private cars (or scheduled transport service) are required for transfers and for the arrangement of scheduled consultations.
 - Entrance for staff should be separated from that for patients and escorts, and, at least, there should be an independent entrance for supplies and equipment (laundry, pharmaceutical products, waste, etc.).
 - The structural design will comply to the legislation on disabled access and to the Technical Building Code (DB-SU).
 - Entrance to the DHU from the main entrance should be made through automatic doors that allow visibility in both directions.
 - Entrance hall should be wide enough to allow smooth flow towards the reception/admission desk.

- Admission

- All DHU must have a dedicated reception and admission area.
- This area would have enough room to allow staff to provide attention to patients and their escorts (considering the need of a certain degree of privacy) during the admission process: recording of patient details, organization of appointments, organization of lists and anticipation of cancellations, communication with patients, etc.
- Discharge proceeding will also be carried out in this area, when necessary.
- The administrative area will have the necessary equipment for its efficient operation (electronic office, IT equipments, email, telephones, fax, and answering machine for attention out of working hours) and it should have an area planned for storing specific documents: protocols, brochures, etc.
- The admission desk should be designed so that it is accessible from the main entrance and can be easily spotted by patients and escorts. Admission staff should clearly see the main entrance and people flows.
- It is recommended that all administrative formalities will be carried out, when possible, at the admission desk, avoiding the need of adjoining offices. On newly designed building, the IT system should hold the execution of all activities, including, apart from strictly administrative ones, the management of clinical documentation.

- Waiting rooms

- It should be located by the admission area and it should include a specific area for patients and relatives; it can be the same waiting area used during the procedures and recovery. It should be comfortable and must have toilets, telephone, television and a cold drinking water fountain.
- The size of the waiting room will depend on the volume of activities scheduled and on the socio-cultural characteristics of the area.

There should be 1.5 comfortable chairs per patient of the unit (waiting times may be lengthy).

- This main waiting room will have direct access from the entrance hall, it will allow visual contact with the reception desk and will provide access to Day Hospitalization area, consultation rooms and to medical treatment and investigation units.

- Toilets

- By the main waiting room there will be public toilets, including a disabled toilet, with washbasin and toilet. Size will be proportional to the waiting room.

Table 6.1 Structural and functional characteristics of the reception area.

Area	Purpose	Structural characteristics
ENTRANCE	Gives access to admission and waiting areas.	<ul style="list-style-type: none"> • Adequate signposting. • Separate car park desirable. • Street level, if possible. • Close to entrance, if shared access. • Disabled access. • Separate goods access.
ADMISSION	Patients and escorts attention during the admission process.	<ul style="list-style-type: none"> • Appropriate size. • Guarantee of a certain degree of privacy. • Adequate equipment: electronic office, IT equipments, email, telephones, answering machine, fax, etc. • Easy to find. • Should allow reception staff to see the main entrance and the waiting room when seated.

Area	Purpose	Structural characteristics
WAITING AREA	It allows patients and escorts to be on the best comfortable conditions while waiting.	<ul style="list-style-type: none"> • Comfort (lengthy waiting times). • 1.5 comfortable seats per patient treated at the unit. • Toilets. • Telephone. • Television. • Cold drinking water fountain.
TOILETS	For patients and escorts during waiting times.	<ul style="list-style-type: none"> • With washbasin and toilet. • Must have disabled toilet. • Proportional to the size of the waiting room.

Day Hospital beds/chairs area.

It includes the area in which procedures are performed. It is an area of internal flow, reserved exclusively to patients and staff. Its design should be able to adapt to all treatments and thus to all their structural and functional requirements.

The fact that there may be some patients who may attend the unit without a scheduled consultation does not imply the need of additional structural requirements though, in some cases, it may be advisable to allocate specific resources to it .

This area will have the following characteristics:

- Consultation room:
 - At DHUs; care prior to treatment frequently implies exploration, diagnosis, patient selection after clinical evaluation and explanation of therapeutic guidelines. Moreover, it is necessary to provide the patient with appropriate information and to obtain his/her consent.
 - These procedures are conducted at the consultation rooms area, being its number directly related with the volume of activity and its working hours. Annex 3 provides the sizing criteria of consultation rooms.
 - Consultation rooms must allow in unique premises both

consultation and exploration; privacy is thus improved and greater versatility is achieved in an area which is thus much more functionally flexible.

- The consultation room should have enough space to hold the doctor, the necessary nursing staff, according to the requirements of each consultation, the patient and, when appropriate, his/her escort.
- Besides consultation and exploration on these premises blood pressure will be taken and other minor diagnostic and therapeutic procedures will be performed. Therefore, apart from office furniture (table, reclining chairs, chair) it will be necessary an exploration bed accessible by both sides with the possibility to isolate it by means of curtains or screens, and other clinical furnishings to hold disposable material and equipment.

Figure 6.2. Consultation room for minor diagnostic procedures.



- Physical distribution will provide privacy and will allow communication with adjacent consultation rooms, in order to permit staff flows.
- The standard consultation room may be used by other specialities

so it is recommended that its distribution should be designed on the most flexible way, adapting, when necessary, the specific requirements of the premises and/or the equipment to the type of consultation.

- Besides medical consultation, this area could be also used for nursing consultation, or as minor surgery room and information office, if this allows a more versatile distribution of space and a better functional adaptation to the characteristics of the each unit activities is achieved.

- Day Hospital area

- In some cases, the healthcare process will be structured (if treatment allows it) in such a way that patients may gain access directly to the Day Hospital area from the waiting room without undergoing consultation. This does not imply that the typical consultation procedures will not be conducted (in these cases they may be carried out on the Day Hospital area).
- Moreover, after treatment, the patient may recover on the same resource, or, if the procedure implies specific care, he/she may be moved to an observation unit within the Day Hospital area.
- Finally, it is important to consider that the areas devoted to treatment may take different shapes; reclining chairs and beds may be used depending on the characteristics of each treatment. With this range of possibilities we suggest, as in other cases, having flexible units which may adapt easily to the changing needs of the unit, except for those cases in which the requirements could be clearly foreseen (i.e., if the same kind of patients under the same kind of treatment are treated in this area).

Figure 6.3. Day Hospital cubicle with bed



- Cubicles for Day Hospitalization should have oxygen and vacuum connections; adjustable beds or reclining chairs, according to the necessities; a table with enough room to keep personal belongings and overbed frame; enough room for an extra chair (for an escort, if suitable).

Figure 6.4. Day Hospital cubicle with reclining chair for treatment.



- Each cubicle will have all the necessary electric systems both for lighting and for the medical-electric equipments which treatments may require. Availability of television sets will be an asset. Patients should have a control to call nursing staff, to regulate lights and, when necessary, a TV remote control.
- Location of windows is especially important. When possible, patients should have natural lights and views to the outside of the building, though they should always guarantee patients privacy when treatment implies the patient being undressed.

Figure 6.5. Day Hospital chair with natural light.



- Cubicles may be fitted out in common wards or in individual rooms according to treatment. In common wards each bed/chair should have, at least, 3x2.5m around and it should be conveniently isolated by means of curtains, folding screens or fixed partitions.

Figure 6.6. Day Hospital common ward.



- Day Hospital common wards used by patients of both sexes show clear structural and economic advantages. Notwithstanding, this distribution must not compromise intimacy and dignity conditions of treatments.
- In some cases, for specific patients and procedures, the use of individual cubicles may be more appropriate. The requirements of those premises are, in general, the same as those of the common wards.

Figure 6.7. Resource to allow privacy for treatments.



- Cubicles must allow sufficient room to grant staff easy access to the patient. Standard procedures may require negatoscopes (in newly built facilities working stations with the appropriate software for looking up clinical records and radiographic images), exploration lamps, CPR equipments (for eventual complications) and hand cleansers.
 - Recovery and treatment will generally take place on the same unit. However, in some cases, patient condition may allow to leave the unit free (so that it may be used by other patients) even though the patient is not ready for discharge. In those cases, patients may wait at the common waiting room (i.e., until they are taken care of at the consultation room or they get specific clinical information). A ward could also be fitted out for this purpose.
- Changing rooms
 - Changing rooms will be placed by the treatment units.
 - They will be separated by sexes and they will have enough room for lockers, to clothes and personal belongings safe.
 - Patients toilets
 - Specific for patients, placed by the changing rooms with similar equipment to the public ones and with a proportionate size to the unit.

Table 6.2. Physical and functional characteristics of the surgical functional area.

Area	Purpose	Structural characteristics
CONSULTATION ROOM	Exploration, diagnosis, patient selection after clinical evaluation and explanation of therapeutic guidelines. Information and support.	<ul style="list-style-type: none"> • Number of consultation rooms according to performance. • With the necessary equipment and facilities to assure its operation and with the adequate privacy conditions. • Flexible structure appropriate to the needs of the different specialities performed at the unit. • Surgery consultation rooms, minor surgery rooms and information offices could be fitted out according to necessities.
DAY HOSPITAL AREA	Treatment administration and, when necessary, patient recovery.	<ul style="list-style-type: none"> • It may undergo different shapes using as main support treatment chairs and beds, according to the characteristics of the procedure. • In common wards (equipped to guarantee privacy and dignity) or in individual rooms. • With the necessary equipment and facilities for its operation, with flexible structure, adequate to give support to the broad range of procedures, according to their functional requirements.
CHANGING ROOMS	For patients to get changed and for keeping personal belongings safe	<ul style="list-style-type: none"> • By the treatment units and the consultation rooms. • Independent (men and women). • With lockers for personal belongings.
TOILETS FOR PATIENTS	For patients and escorts during waiting times.	<ul style="list-style-type: none"> • Placed by the changing rooms. • With WC and basin. • It must include a disabled toilet. • Proportionate number to the number of consultation rooms and places at the Day Hospital Unit.

Nurse stations and general utility rooms.

It encloses all the physical resources devoted to the observation of patients while treatment and recovery, to the planning of the procedures and to other administrative nursing tasks, and all the utility rooms necessary at the unit (management and, when needed, medication storage, materials, equipment, laundry and food).

This area will have the following characteristics

- Control
 - It will be placed on the central area of the unit (Day Hospital common ward) with an easy access to cubicles and the consultation room areas. It will be an open area to reduce distances and to facilitate control. Its support equipment will be selected in accordance with the treatments and the caring processes conducted and with their recovery.

Figure 6.8. Nurse station



- It will have a desk with enough room for writing, IT systems, including a switchboard, enough space for storage of working materials and equipment. In newly built areas, it is recommended the implementation of working units with access to patient management applications and a clinical working unit.

- Utility rooms

- The area will have a clean utility room (preparation of medicines, which allow handling of used medicines), dirty utility room and waste disposal, kitchen and areas for laundry, disposable materials and equipment storage.

Figure 6.9. Area for material storage



- When possible, it is advisable to introduce all available advances for utility rooms on logistics (i.e. pneumatic tubes, double-box multi-storage system, automatic medicine dispensers, or, failing that, unit-doses devices), catering (i.e., isotherm trays, rethermalisation of food prepared on cook-chill units) and waste disposal.

Figure 6.10. Pneumatic tube.



Table 6.3. Physical and functional characteristics of the nurse station and the utility rooms.

Area	Purpose	Structural characteristics
CONTROL	Patient control during treatment and recovery. Procedures planning and other administrative nursing tasks.	<ul style="list-style-type: none"> • In the central area of the DH common ward with easy access to other healthcare premises. • Working unit and software for patient management and clinical working unit.
GENERAL UTILITY ROOMS	Medicine preparation, kitchen or food preparation unit, cleaning and waste disposal manager and storage.	<ul style="list-style-type: none"> • With the adequate facilities for its operation and, when possible, with the available technical advances.

Administrative area and staff rooms

Within this area are included all the premises used for offices, staff meeting rooms, so that caring, teaching and resting activities may be adequately developed.

This area will have the following characteristics:

- **Offices**
 - The number of offices will be proportionate to staff, especially to the number of workers whose activity implies using offices, whether individual (i.e. manager doctor or nurse offices) or common (meeting rooms, library).
 - Offices will be provided with ergonomic furniture; they will guarantee privacy and promote team work. They will have IT systems and access to the data networks as well as working units with the clinical unit applications.
- **Staff room**
 - Its size will be proportionate to the size of the unit; it will have specific toilets as well as changing rooms, according to its organization and to the existence of additional close-by staff rooms.

Figure 6.11. Staff kitchen



The Generic programme of premises (Annex 4 provides a specific example of a DHU) will include the following⁽²¹⁾:

Table 6.4. Premises structural design programme

Area	Premises	N.º	Surface	Total surf.
RECEPTION	1. Main waiting ward. 2. Toilets. 3. Disabled toilets. 4. Reception.			
DAY HOSPITAL	5. Consultation room. 6. Nurse consultation room. 7. Information office. 8. Minor surgery ward. 9. Patient toilets. 10. Patients changing room. 11. DH bed/chair (common ward). 12. DH bed/chair (private room).			
NURSE STATION AND GENERAL UTILITY ROOMS	13. Counter and staff working area. 14. Clean utility room. 15. Medicine preparation unit ⁽²²⁾ . 16. Laundry room. 17. Disposable material storage room. 18. Material and equipment storage room. 19. Kitchen. 20. Dirty utility room and waste disposal. 21. Cleaning equipment room.			
ADMINISTRATIVE AND STAFF AREAS	22. Staff toilet and changing room. 23. Unit manager office. 24. Nursing manager office. 25. Meeting room / working room / library. 26. Resting room.			

On all areas there will be, when needed, premises and facilities adapted for paediatric patients and their escorts.

⁽²²⁾ Only in DHs that need it specifically (i.e. onco-haematologic where, due to their dimension or to the disposition of the chemist service, cytostatic drugs are prepared in the unit).

6.2 Equipment.

Annex 3 explains the resource sizing criteria and annex 4 the functional programme, including the premises programme and the characteristics and equipment of a polyvalent DH with 10 beds/chairs and an onco-haematologic one with 20.

The criteria and the recommendations of both annexes, together with the relation of the necessary equipment on each of the premises considered in the programme bellow may help when planning the unit⁽²³⁾.

Table 6.5. Relation equipment/premise.

Premises	Equipment
RECEPTION	
Main waiting room. <i>Equipped taking into account lengthy sessions and with an adequate capacity directly related to the size of the DHU. Telephones and background music. Cold food and drinks vending machine.</i>	<ul style="list-style-type: none"> • Chairs and other seats. • 3-seat benches. • Pictures. • Low tables. • Coat stands. • Cold water fountain.
Public toilet. <i>Toilets for visitors and patients. With washbasin and WC.</i>	<ul style="list-style-type: none"> • Paper dispensers. • Paper towel dispensers. • Toilet brushes. • Mirrors. • 25l swing lid waste bin. • Coat stand. • Soap dispenser.
Disabled toilet <i>Disabled toilets for visitors and patients</i>	<ul style="list-style-type: none"> • Paper dispensers. • Paper towel dispensers. • Toilet brushes. • Mirrors. • 25l swing lid waste bin. • Coat stand. • Soap dispenser.
Reception <i>Reception of patients and relatives. Administrative processes: registration and discharge. The counter should not represent a barrier and should be accessible to wheelchair users. Computers and telephones.</i>	<ul style="list-style-type: none"> • Work stations / computers. • Laser printer. • Counter. • Drawers. • Shelves. • Ergonomic office chairs. • Telephone. • Fax.

⁽²³⁾ Specific numbers are avoided as they depend on the exact number of boxes and on the other characteristic dimensions of the premises.

Premises	Equipment
DAY HOSPITAL	
<p>Consultation room.</p> <p><i>It includes exploration area and office. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.</i></p>	<ul style="list-style-type: none"> • Consultation room cabinet. • Chairs. • Metallic display cabinet with sliding doors. • Ergonomic office chair. • Exploration bed. • Picture. • Miscellaneous consultation room instrument, according to specialities. • Pen torch. • Modular desk with drawers. • Front lamp. • Portable digital sphygmomanometer. • Laser printer. • Phonendoscope. • Exploration lamp. • Telephone. • Work stations / computers. • Vacuometer. • Flow meter. • Paper towel dispenser. • 25l swing lid waste bin. • Soap dispenser. • Negatoscope⁽²⁴⁾.
<p>Nurse consultation room.</p> <p><i>Same characteristics and facilities of the consultation room (6).</i></p>	<ul style="list-style-type: none"> • Consultation room cabinet • Chairs. • Metallic display cabinet with sliding doors. • Ergonomic office chair. • Exploration bed. • Picture. • Miscellaneous consultation room instrument, according to specialities. • Pen torch. • Modular desk with drawers. • Front lamp. • Portable digital sphygmomanometer. • Laser printer. • Phonendoscope. • Exploration lamp.

(24) Only in those cases in which a digitalized radiologic image accessible from the clinical unit is not available.

Premises	Equipment
	<ul style="list-style-type: none"> • Telephone. • Work stations / computers. • Vacuumeter. • Flow meter. • Paper towel dispenser. • 25l swing lid waste bin. • Soap dispenser.
<p>Information office.</p> <p><i>For patient and relatives information. Computers and telephones.</i></p>	<ul style="list-style-type: none"> • Ergonomic office chair. • Chair. • Modular work desk with drawers. • Work station / Computer. • Telephone. • Picture.
<p>Minor surgery room</p> <p><i>For minor surgery apart from treatment and recovery units. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.</i></p>	<ul style="list-style-type: none"> • Instruments for minor surgery. • Vacuumeter. • Flow meter. • Stand for intravenous drips. • Auxiliary table. • Exploration lamp. • Stainless worktop with sink and accessories. • Minor surgery chart. • Exploration bed. • Aspirator. • Cabinet for sterile equipment. • Multi-box storage system for disposable material. • Paper tower dispenser. • 25l swing lid waste binl. • Soap dispensers.
<p>Patient toilet</p> <p><i>For patients. With washbasin and WC.</i></p>	<ul style="list-style-type: none"> • Paper dispensers.. • Paper towel dispensers. • Toilet brushes. • Mirrors. • 25l swing lid waste bin. • Coat stand. • Soap dispenser.
<p>Patient changing room</p> <p><i>Changing room and lockers for personal belongings.</i></p>	<ul style="list-style-type: none"> • Individual lockers. • Benches.

Premises	Equipment
<p>Day Hospital area (common ward)</p> <p><i>Cubicles for treatment administration and, if necessary, for patient recovery. Open-plan area, distributed guaranteeing direct visual control from the nurse station; with the possibility of closing off for privacy (never compromising patient safety). With chair or bed for treatment; windows with blocking devices and cleaning and airing positions. Headboards with power points and oxygen and vacuum connections. Integrated call and communication system with nursing staff. TV and music pre-installation. Computer connections. Stainless steel worktop, washbasin and elbow mixer taps with thermostat control (on the common ward for medical staff).</i></p>	<ul style="list-style-type: none"> • Reclining chairs. • Aspirator with filter for inhaled medication. • Electric beds with accessories. • Self-inflating resuscitation bag. • Crash cart. • Couch. • Flow meter. • Defibrillator with paddles for adults and newborns. • Working stations / computers. • Equipment (stands for intravenous drips, ceiling hooks, etc.). • Table with overbed frame. • Multi-parameter monitor. • Emergency cart. • Blood pressure monitor with different wrist models. • Oximeter. • Transport ventilator. • Perfusion pump. • Vacuometer. • Chair.
<p>Day Hospital area (private room)</p> <p><i>With similar characteristics and facilities to the common ward (11), for patients to whom, due to their clinical condition or to the kind of procedure, isolation is recommended. It may have a toilet (with similar characteristics to 9) or not (in that case the patient toilets of the area will be used) If necessary, DH common equipment (crash cart) could be used.</i></p>	<ul style="list-style-type: none"> • Electric bed with accessories. • Flow meter. • Table with overbed frame. • Multi-parameter monitor. • Blood pressure monitor with different wrist models. • Oximeter. • Perfusion pump. • Vacuometer. • Chair

Premises	Equipment
NURSE STATION AND GENERAL STOREROOMS	
<p>Counter and staff working area.</p> <p><i>It must allow direct visual control of all cubicles in the common ward. Adequate command and control, accessible to wheelchair users. Fitted with patient/nurse communication system via warning lights and buzzers. Pneumatic tube terminal. Safety and fire alarm control panel, gas detectors control panel. Computers and telephones.</i></p>	<ul style="list-style-type: none"> • Counter. • Ergonomic office chairs. • Laser printer. • Filing cabinet. • Picture. • Metal shelves. • Communication system Tel DECT. • Modular desk with drawers. • Waste bin. • Healthcare Management PDAs. • Coat stand. • Chair. • Cabinet with shelves. • Work stations / computers. • Telephone.
<p>Clean utility room</p> <p><i>Storage for clean equipment, medicament preparation.</i></p>	<ul style="list-style-type: none"> • Fixed 60cm stool. • Clinical unit with double sink above storage space • Soap dispenser. • 25l swing lid waste bid. • Paper towel dispenser. • Wall-mounted glass case (80 x 90 x 35cm). • Refrigerator.
<p>Medicine preparation unit⁽²⁵⁾</p> <p><i>For special preparations. With pre-installation for a laminar flow cabinet and sink.</i></p>	<ul style="list-style-type: none"> • Fixed 60cm stool. • Clinical unit with double sink above storage space. • Soap dispenser. • 25l swing lid waste bid. • Paper towel dispenser. • Wall-mounted glass case (80 x 90 x 35cm). • Refrigerator. • Transport cart for cytostatic. • Clinical unit with double sink above storage space. • Stainless steel worktop. • Laminar flow cabinet. • Telephone.

⁽²⁵⁾ Only in those units that require it.

Premises	Equipment
<p>Laundry room</p> <p><i>For clean laundry</i></p>	<ul style="list-style-type: none"> • Clean laundry trolleys. • Metal shelves.
<p>Disposable equipment storeroom</p> <p><i>For small regular equipment. Area for supply carts with cyclic replacement system. Surfaces should be washable. Modular shelves higher than carts. Adequate area for the storage of salines.</i></p>	<ul style="list-style-type: none"> • Double-box storage system. • Metal shelves.
<p>Equipment store room.</p> <p><i>For apparatus and equipment.</i></p>	<ul style="list-style-type: none"> • Metal shelves.
<p>Kitchen</p> <p><i>Arrival of carts with dished up food and food preparation. Adapted to the cooking and hospital distribution of food technologies. Double sink with draining board, fridge and microwave. Area for the storage of food carts.</i></p>	<ul style="list-style-type: none"> • Kitchenware cupboard. • Refrigerator. • Microwave. • Double sink and draining board and waste disposal unit. • 25l swing lid waste bin. • Paper towel dispenser.
<p>Dirty utility & waste disposal room</p> <p><i>For dirty laundry and waste disposal. Sink.</i></p>	<ul style="list-style-type: none"> • Double sink and waste disposal unit. • 25l swing lid waste bin. • Paper towel dispenser.
<p>Cleaning equipment room.</p> <p><i>For cleaning products and equipment</i></p>	<ul style="list-style-type: none"> • Metal shelves.
ADMINISTRATIVE AND STAFF AREAS	
<p>Staff toilets and changing rooms</p> <p><i>For DH staff. With similar characteristics to (2 and 9)</i></p>	<ul style="list-style-type: none"> • Paper dispensers. • Paper towel dispensers. • Toilet brushes. • Mirrors. • 25l swing lid waste bin. • Coat stand. • Soap dispenser.

Premises	Equipment
Unit's manager office <i>Computer and telephone connections</i>	<ul style="list-style-type: none"> • Ergonomic office chair. • Cabinet with shelves. • Picture. • Work station / computer. • Ink jet printer. • L-shaped executive desk with drawer. • Round conference table. • Waste bin. • Coat stand. • Chair. • Filing cabinet. • Wall-mounted blackboard. • Negatoscope. • Telephone.
Nurse manager office <i>Computer and telephone connections</i>	<ul style="list-style-type: none"> • Ergonomic office chair. • Cabinet with shelves. • Picture. • Work station / computer. • Ink jet printer. • L-shaped executive desk with drawer. • Round conference table. • Waste bin. • Coat stand. • Chair. • Filing cabinet. • Wall-mounted blackboard. • Telephone.
Meeting room / working room / library <i>Staff working area, with computer and telephone connections</i>	<ul style="list-style-type: none"> • Wooden shelves. • Ergonomic office chairs. • Wall-mounted blackboard. • Coat stand. • Waste bin. • Laser printer. • Work stations / computers. • Pictures. • Overhead projector. • Filing cabinets. • Modular desks with drawers. • Round conference table. • Chairs. • Telephone. • Negatoscope.

Premises	Equipment
Staff resting room <i>For staff resting and refreshment.</i> Sink.	<ul style="list-style-type: none"> • Floor and wall cupboards. • Pictures. • Worktop with sink, microwave and refrigerator. • Central table. • Coat stand • Chairs. • Reclining chairs. • 25l swing lid waste bins. • Paper towel dispenser. • Telephone.

6.3 Medical supplies. Sterilization

All healthcare centres with DHs should have strict control on the storage and distribution of the medical supplies and instruments, paying special attention to expiry dates.

Moreover, they must have safe areas for the correct storage and control of medical supplies and instruments, with the appropriate capacity to respond to their needs and with the adequate methods of classification and control. Moreover, they should guarantee, by means of adequate distribution systems, the availability of all the necessary material for all the activities performed at the unit. When possible, the use of periodic replacement systems (i.e. double-box) is highly recommended.

Healthcare centres should guarantee the appropriate use of sterile material. Single-use equipment should be disposed after being used, and, under no circumstances, there could be a possibility of its being re-used. Sterile equipment package should provide the sterilization date and the use-by date.

All non-disposable material or instruments that may penetrate the skin or the mucous membranes or that may be in contact with the mucous membranes, mucus or other organic body fluids have to be cleaned and sterilized before each use, by means of an efficient and adequate system.

Whenever necessary, staff and patients will be equipped with the appropriate personal protection.

6.4 Prevention and control of hospital acquired diseases.

Healthcare centres with DHUs should establish the adequate procedures to prevent and control hospital acquired diseases. Those procedures should analyse the healthcare processes specifically conducted on the unit and define the appropriate guidelines.

In general, Day Hospital Units do not have specific requirements against nosocomial infections if compared with hospitalization wards, consultation rooms or units for diagnostic or therapeutic procedures. As in those places, both patients and staff may run the risk of acquiring an infection or of transmitting it both sides. Therefore, the so called “universal precautions” and hospital policies on infection control should be carefully observed.

6.5 Hygiene protocols.

DHUs should keep optimum hygiene and cleanliness in all areas, premises, equipment, apparatus and medical supplies.

DHU should have a hygiene, disinfection and pest control protocol, in accordance with their specific needs. This protocol will be accompanied by an outsource contract that guarantees its fulfilment, unless it is performed by the unit staff.

They should also have a cleaning, disinfection and, where appropriate, sterilization protocol for equipment and non disposable apparatus and instruments.

6.6 Hospital waste management

Healthcare centres with DHU are obliged to identify and classify hospital waste, ensuring that it is correctly removed and disposed of.

Therefore, they should have a protocol for identifying, classifying and handling hospital waste in accordance with the provisions of the current legislation which will be known and followed by DHU staff.

7 Human resources

7.1 Register of medical staff.

Healthcare centres with DHUs should have an updated register of personnel, whichever their contractual relationship with the centre, the way or the place in which they render their services.

This registry will include the following information: registration number, full name, qualifications, professional category, speciality, function, nature of relationship with the centre or organization and, where appropriate, date of leaving, dismissal or retirement and, all the additional information required to comply with the general principles established by the Spanish National Health System Interterritorial Board pursuant to all legislation on the medical profession.

The personnel register will be updated whenever there is any change on the staff and it will be reviewed at least once every three years, checking that all staff meets the necessary criteria for the exercise of their profession. The register will include the unit to which each professional is related to, especially if they work at the DHU.

7.2 Personal file.

Healthcare centres will keep a personal file on each worker, retired employees too, including all documents relating to the qualification, specialized training, professional experience and work life.

The people concerned will be entitled to access these files. Safety and confidentiality of all personal data will be guaranteed.

7.3 Qualifications.

All personnel will work under the principles, the conditions and the requisites established in the medical professional law and in other legal and deontological ethic code applicable⁽²⁶⁾.

⁽²⁶⁾Act 44/2003, November 21st, "ordenación de las profesiones sanitarias" (on Medical profession).

DHU staff should respond to the following qualifications:

- **Unit manager.** He/she will be a surgeon of any of the specialties of the unit or the nursing manager⁽²⁷⁾.

The unit manager will be responsible for:

- Organizing the healthcare staff, from different medical specialties, under a protocolled and agreed by consensus framework, making an appropriate use of the allocated resources.
- Programming the unit, adapting demand to the resources available.
- Controlling and guaranteeing quality.

The unit manager and the person responsible on his/her absence should be of public knowledge and, therefore, it must be indicated in the unit regulations.

- **Nursing manager.** He/she would be a registered nurse.

The nursing manager would be responsible for:

- Coordinating the healthcare services according to the DHU portfolio.
- Programming the activities of the nursing staff.
- Controlling the availability of material resources.

- **Specialized doctors.** Specialized doctors on each of the DHU specialties.
- **Nursery** (healthcare related to the administration of treatments and patients recovery). Registered nurse.
- **Nursing assistant** (at consultations and at DHU). Certified Nurse assistant.

⁽²⁷⁾ DHU is considered a nursing unit for this purpose. The doctor who has prescribed the admission and the treatments at the DHU is the final clinical responsible.

- Secretary (administrative assistant). Certified with the corresponding qualifications.
- Subordinate staff. Hospital porter.
- Additional staff: Depending on the healthcare services and according to the size and the scheduled workload, part time or full time healthcare professionals, such as psychologists (at O-HDHU), social workers or chemists, may be suitable⁽²⁸⁾.

7.4 Medical manager

The medical manager, or the medical staff member acting on his/her behalf, should be present at the DHU when it is open to the public.

7.5 Identification and discrimination of staff members.

Healthcare centres with DHUs will take the necessary measures to guarantee that patients and escorts can identify staff and can distinguish the qualifications and the professional category of the person/s that are caring them.

Healthcare staff professional categories will be distinguished by the uniform and identified by means of a personal ID tag which will clearly show his/her full name and category.

Healthcare staff are obliged to identify themselves when required, indicating their full name, professional qualifications, speciality, category and role, whenever it is not clearly comprehended by the patient.

⁽²⁸⁾ The "Recomendaciones según consenso nacional SEOM " (Recommendations following the national consensus of the Spanish Society of Oncologic Medicine), Madrid, March 2006, considers hiring a full time psychologist when the area of reference exceeds 1 million people and a chemist when the number of doses is over 40 a day.

7.6 Documentation

Healthcare centres will provide to DHU workers, for the correct exercise of their profession and always according to their category, the following:

- a) Patients' clinical records.
- b) Healthcare and clinical practice guides, pathways and protocols.
- c) Internal regulations, as well as the general objectives and functions of the Day Hospital Unit.
- d) Healthcare, informative and statistical documents set by the centre.
- e) The procedures, reports, joint protocols or indicators that may help to guarantee continued patient care.

7.7 Undergraduate and postgraduate training.

7.7.1 Future aims

In the upcoming years, teaching of medicine and specialist training should include not only new healthcare modalities, but also current trends in medicine, cost-effective use of technological advances, quality control, competence of service suppliers, elaboration of clinical pathways and guides. Namely, it should adapt to clinical management techniques.

As to DH, the following aims should be met:

1. To take advantage of the large number of DH patients so as to include this healthcare modality on the practical experience of medical students.
2. To train medical interns on the different functional elements of DHUs.

3. To contribute on the promotion of the basic principles of managed healthcare, through the two previous aims.

7.7.2 DH training for undergraduates and postgraduates.

Medical students, in general, and, in particular, medical interns on specialities which can be treated at DHUs, should be aware of the specific characteristics of this healthcare modality.

7.8 Continued training

DHU will take the necessary measures to allow staff to receive continued training and to undergo research and teaching activities.

Training programmes to keep staff up to date on patients' safety and quality should be provided, according to the unit characteristics.

Health Services and other healthcare organizations should lead the promotion of Day Hospitalization as an option to conventional hospitalization.

For this purpose, when requested, they should provide:

- Specific training for surgeons and other healthcare staff, not only on the techniques included on the DHU portfolio, but also on the management and functional criteria which are necessary for its development and implementation and on the advantages that these techniques imply for patients.
- Opportunities to attend and practice on a DHU for specific procedures.
- Local incentives.
- Patient management, offering DH care when possible.

7.9 Criteria for the calculation of staffing levels.

Necessary human resources may vary according to the kind of patient cared at the unit as well as to the timing, the kind of care service and therapy.

For the smooth running of the unit, it should be provided with nursing staff that must have, apart from the necessary qualifications, vocation and personal capacity to treat this kind of outpatients.

Staff should be arranged in work teams, multidisciplinary if possible, to take care of the different patients needs.

Doctors are in charge of controlling the evolution of patients, of taking the appropriate decisions on the diagnostic procedures and on the adequacy of treatments. Even though doctors do not need to be continuously at the Day Hospital Unit, being thus able to combine this activity with other (outpatient consultation, ward, etc.), their immediate accessibility should be assured (by means of pagers or of any other system).

Nursing staff should care patients. Nurses who work at the unit should have sound theoretic education and broad training, especially on the administration of anti-infective drugs, antineoplastic chemotherapy and other similar treatments, being aware of its side effects and of the necessary precautions to ensure patients safety and comfort during the procedure. They should also have a broad knowledge of the so called “universal precautions”, pleasant manners and a gift for psychologic support.

In order to estimate the necessary human resources, the following criteria should be taken into account:

- Specialized doctors: The number of full time⁽²⁹⁾ doctors can be drawn from the following formula:

$$Sd = \frac{(DHC_{cons} \times DHT_{cons}) + (ATDOTC \times DY)}{HD \times DY \times 60 \times HcP}$$

⁽²⁹⁾ Equivalent to a full time doctor who per service or unit devotes part or the whole of his working activity to DHU.

Where:

Sd	number of full time specialized doctors
DHcons	annual estimate of expected DH consultations.
HTcons	average duration of DH consultation, in minutes.
ATSOTC	average time, in minutes, that specialist devote to other DH activities different from consultations (procedures, for example).
HD	number of daily surgeon working hours.
DY	number of working days per year of a surgeon
HcP	percentage of the healthcare performance of DHUs staff.

- Nursing staff: the calculation procedure is similar.

$$N = \frac{(DHT \times DHTT) + (ATTDOTC \times DY)}{HD \times DY \times 60 \times HcP}$$

$$A = \frac{(DHT \times DHTT) + (ATTDOTC \times DY)}{HD \times DY \times 60 \times HcP}$$

Where:

N	number of nurses
A	number of nursing assistants
DHT	annual estimate of expected treatments.
DHTT	average time, in minutes, devoted to DH treatments.

ATDOTC	average daily time, in minutes, devoted to other DH activities different from treatments.
HD	number of daily working hours of a nurse (or of a nurse assistant).
DY	number of working days per year of a nurse (or of a nurse assistant).
HcP	percentage of the healthcare performance of nursing staff.

- Non-medical support staff: Except in large DHU, one full-time administrative assistant and a full-time porter will be enough.

8 Quality

8.1 Authorization and Registry

As stated on chapter 1 “Introduction” there is no specific legislation in Spain about the legal requisites that Day Hospital units must follow, therefore, in Spain, they base their working activity, from an administrative point of view, on the authorization of the healthcare centre they belong to or, if they do not belong to a broader healthcare organization, they do have a generic authorization as an outpatient centre.

8.2 Accreditation and Audit

The only clear reference to DHUs published on the current legislation is included within the “Manual de Estándares Esenciales del Sistema de Acreditación de Centros Sanitarios de Cataluña” (Manual of essential standards of the accreditation system of healthcare centres of Catalonia)⁽³⁰⁾. It deals with the adaptation of the building and settles that it will be considered as an improvement on Day Hospital Units the “*adaptability and multiple-function possibilities of boxes, which will be arranged around the support spaces on a unique and centralized disposition*”

There are, on the other hand, some examples on ISO 9001 certifies on Medical Oncology services, which include care at ODHUs.⁽³¹⁾

8.3 Quality indicators

In general, the information systems of specialized attention on each Spanish region include data relating to structure (i.e., number of beds/chairs according to the kind of Day Hospital Unit) and activity (i.e., number of treatments, number of patients) of DHUs. Details of performance and average duration of treatments may be obtained from this data though there are not specific quality indicators for these units.

⁽³⁰⁾ Decree 5/2006, January 17th, of the Regional Government of Catalonia. See Chapter 2, paragraph 2.1.2.2

⁽³¹⁾ I.e.: Medical Oncology Service of the General University Hospital of Valencia.

On the Guide published in 1998 by the former Spanish National Health Institute (INSALUD) on Day Hospital Units for patients suffering from IHV/ADIS there was an initial quality evaluation of DHUs⁽³²⁾, which made reference to “the two main constituents of quality, the scientific one (diagnostic and therapeutic adaptability) and the one that was perceived (the patient values whether he had been treated as he would have wanted). It suggested the following indicators:

- Number and type of the protocolled procedures.
- Percentage of procedures conducted under protocols.
- Satisfaction surveys about service and treatment.
- Patients’ complaints

For the Healthcare centre and the National Health System, and for the benchmarking strategies of the hospital to which the DHU belongs in relation with other hospitals, the following system efficiency indicator is suggested.

Table 8.1. DH index

Indicator	Definition	Calculation
DH index	It calculates the global impact of DHU on conventional hospitalization of the centre.	% [(DHU sessions/total number of stays)]. (DH and stays for surgery are not included).

One of the key indicators of the National Health System¹ may apply to DHU:

- Rate of transfusion reaction.

The ratio between places at DHUs per population, which is also included on the Key indicators of the Spanish National Health System, is an indicator of the resources per population which should be analyzed by the central services of the regional governments.

⁽³²⁾ Paragraph 6.5. Quality indicators.

Finally, satisfaction surveys should be conducted, in order to value the apparent quality or the quality felt by user. In order to be able to compare DHU satisfaction surveys, the following methodology, which responds to the “Health Barometre”²⁵ could be used:

Overall, the care you have received in the DHU has been...?

- Very good.
- Good.
- Average.
- Poor.
- Very poor.
- Don't know/ no answer.

Therefore, a set of 4 indicators, summarized on the following table, will be selected:

Table 8.2. Quality indicators.

Quality dimension	Indicator		Calculation
Scientific-technical quality and efficiency of the DHU	1. Cancellation of procedure.		% [(cancellations / patients with appointments)].
	2. Adverse events.	2.1. Rate of transfusion reaction.	% [(transfusion reaction / procedures in which blood or haemoderivatives transfusions have been performed)].
System efficiency	3. Day hospitalization index.		% (DHU procedures / Stays in conventional hospitalization) (DH and stays for surgery are not included).
Quality perceived by DHU users	4. Satisfaction index.		% in each response category.

9 Criteria for the reviewing and monitoring DHU Standards and Recommendations.

Twenty five years have past since the publication on Spain of the first issues on day surgery as a healthcare modality. On that time very important changes have occurred, not only in relation with DS but also in the organization and management of the health system. Future scenarios show that these changes may be even more profound thanks to the technical-scientific advances, as well as for the steps forward taken on IT and communications and on the management of healthcare services. Therefore, it is highly recommended that this report should be reviewed and updated within ten years at the most, however, this period of time may be shorter if changes make it necessary to modify any important aspect and/or any of “strong” recommendations of this report.

Throughout the setting up process of this report, some lacunae have been identified, particularly on the availability of information and on the proven experience about how DHU work on the Spanish health system. In order to improve this knowledge as the source for setting up recommendations based on evidence, or at least, in experience, it is highly recommended that the next review should include, apart from the topics included in this document, the following items:

- Elaboration of a catalogue of procedures conducted at DHUs. The analysis of DHU discharges under the CMBD code and grouped, so that it may substitute Annex 1 and apply to the Spanish National Health Service.
- An estimation of time and budget for each DHU procedure which is included in the catalogue, or at least for the most usual.
- A systematic analysis of DHU quality indicators, which will comprise the set of indicators recommended in section 8.3.
- The elaboration of the standards and recommendations for the Day Hospital Units which are not included on this report.

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Annex 1. List of polyvalent DHU procedures.⁽³³⁾

- Aspiration
- Biopsies (hepatic, muscle, bone, pleural, kidney,...).
- Subcutaneous pump.
- Post diagnostic-therapeutic procedure care.
- Blood extraction.
- Venous central catheter and subcutaneous reservoirs care.
- Minor surgery.
- Drainage.
- Intravenous perfusion (chemotherapy).
- Intravenous perfusion (other).
- Nasogastric intubation.
- Shots.
- Nebulization.
- Paracentesis.
- Bone marrow puncture-biopsy.
- Lumbar puncture.
- Chemotherapy.

⁽³³⁾ It does not include procedures performed in other units different from the DHU (such as day surgery, endoscopy, haemodialysis, cardiac catheterisation) even though the patient is afterwards transferred to the DHU, before being discharged either to his/her home or to alternative accommodation.

- Thoracentesis.
- Arthrocentesis.
- Blood transfusion.

Annex 2. Activity management at O-HDHU.

Onco-haematologic hospitals are complex healthcare structures, which scope is far beyond the administration of ambulatory intravenous chemotherapy. Activities management, which include blood extractions, care of catheters, minor surgery and other healthcare procedures such as thoracentesis, paracentesis, lumbar punctures, etc., is determined not only by the special characteristics of its patients but also by the medical and logistic factors which imply treatments and therapeutic procedures.

It is an organization scheme⁽³⁴⁾ which responds, broadly, to the model described in chapter 5, although it represents specific aspects and which configuration is of special interest as an example of adapting work to the patients' needs (simplifying process to its maximum in order to make episodes the less disturbing as possible) in order to make compatible efficient attention and a better use of the available resources.

O-HDHU working criteria: schedule of the procedure

The best circuit for the first, and successive, day of chemotherapy should be:

- Patient reception.
- Blood extraction.
- Prescription and confirmation of the procedure.
- Confirmation of the appointment with the unit agenda.
- Treatment administration.
- Final control.

The computerization of the follow-up of this circuit is highly recommended.

⁽³⁴⁾ Based on the recommendations of the Spanish Society of Medical Oncology¹.

Agenda management and patient reception.

Appointments for any of the procedures included in the service portfolio will be arranged by means of well designed (with algorithms which may provide the best possible combination), flexible and modifiable software media.

Patients should be scheduled according to the different types of administration, customizing appointments according to their characteristics and preferences, when possible.

Agenda management should be general. Outpatient consultations, therapeutic procedures and treatments would be independently scheduled.

Software should allow to register patient at his/her arrival to the unit and to call patients for consultation in the area in which treatment will be administered.

Blood extractions and catheter care

Prescription or, when needed, confirmation of the procedures implies, generally, the medical evaluation of the results of clinical analysis, which require taking previously the necessary biological samples (blood, mainly).

Patients may be offered to undergo extractions at the unit, as soon as he/she has been registered. However, it is highly recommended to take advantage of the extraction structure of primary healthcare centres, whenever the patient condition allows it, so that: 1. the doctor may value results before patient's arrival to the unit and 2. DH procedures may be as simplified as possible.

The high frequency rate of the need to obtain blood samples has spread catheter implantation. This activity is routinely conducted at O-HDHU, although it is recommended to include it gradually on Primary Healthcare, to avoid unnecessary trips to patients.

In order to encourage both measures, Primary Healthcare coordinating working groups should be established, in order to make up the logistics of the process and to train nursing staff of primary healthcare centres on the adequate techniques (catheter removal and care).

Consultation

The aim of O-HDHU consultation is the clinical evaluation of the patient and the prescription or confirmation of the treatment he/she must undergo (besides providing information, obtaining the consent and, when necessary, recommending new diagnostic tests or therapeutic procedures).

As stated on the suggested circuit, consultation is scheduled once the doctor has the analytic results needed for confirming procedures, so as to get the best course of action possible.

Moreover, a nursing consultation on the unit is considered appropriate in order to:

- Receive patients and make them consider O-HDHU as the place where they could contact should any problem arise.
- To inform patients about the structure and working methodology of the unit.
- To provide additional information on the diagnosis, procedures and adverse events.

For its implementation, specific nursing staff should be taken on.

Treatment prescription

Treatment prescription process should be computerized, when possible. The process should only allow doctors to prescribe treatments and should avoid any comprehension problems which cause mistakes on the formulation. Thus, it is highly recommended:

- To avoid paper as a means for prescribing. Printed sheets of each scheme could be temporary used.
- To integrate therapeutic orders so that, once issued, no one can modify them, but validate them.
- To protocol the procedures related to the prescription / preparation and administration of the treatment, coordinating each stage of the

process with the corresponding provisions through the efficient management of agendas⁽³⁵⁾.

Treatment preparation.

The efficiency of drug oncologic therapy is one of the basic mainstays of the treatment. However, once doctors settle the prescription, treatment may provoke several drawbacks, as its high toxicity, even though when it is correctly administered, but which may have several side effects if mistakes occur on the doses preparation or in the reconstitutions or administration process, or if contamination comes about in the handling process, etc.

Therefore, drug preparation should always take place under pharmaceutical control, so that once prepared it should be administered without being handled, guaranteeing, thus, the composition and stability of the formula, staff safety conditions and environmental pollution prevention.

Treatments should be available by the time the patient is assigned to the corresponding resource (O-HDHU bed/chair) for treatment.

Antineoplastic treatments can be prepared at large O-HDHU (over 25 beds/chairs for treatment) whenever they have the appropriate adequate conditions and the necessary physical (equipment, mainly) and human resources and whenever it can be proved that it improves quality and efficiency of the unit.

In all circumstances, healthcare centres with O-HDHU will have a specialized chemist on oncology who would guarantee control and safety in all preparations.

Treatments

Unit operational management should adjust to the times of administration of each prescription.

⁽³⁵⁾ Scheduling of a specimen patient for the first chemotherapy session, for example, would imply, according to the suggested circuit: 1. appoint for blood extraction (unless it has been performed at the primary healthcare centre, though coordinated in so that the doctor has the analytic results before consultation). 2. consultation appointment (patient evaluation and treatment prescription / confirmation) 3. resource allocation -DH bed/chair- where treatment will be administered (previously prescribed, normally confirmed but also modified and cancelled, if needed, prepared and distributed).

To manage bedschairs occupation, the time scheduled for each treatment should be real. Half hour intervals could be settled in order to optimize scheduling. Optimal hydration time should also be protocolled.

Transfusions, thoracentesis and paracentesis

Transfusions can be conducted at the unit. As most of them are scheduled they could be incorporated to the procedures agenda as any other procedure.

Thoracentesis, paracentesis and aspirations /biopsy should also be performed at the unit. It is not considered adequate to address patients to the A&E services for this purpose, as the unit should offer a complete and integrated treatment that responds to the patients' needs.

Healthcare continuity

On the other hand, there should be a healthcare modality which will allow unscheduled patients to be treated on or under unexpected situations, preventing them from attending the A&E service in order to guarantee continuity on the healthcare process.

For this purpose, procedural protocols should be settled at the general A&E services in order to treat these patients on emergency cases which may take place out of the working hours of the unit and to always provide a contact point for them.

Moreover, during the Day Hospital Unit opening hours, the manager of the O-HDHU (or other medical staff member acting on his/her behalf) should act as consultant on A&E services. Besides, any patient cared at the unit should have an appointed doctor in charge with whom he/she can contact (either the patient or his/her General Practitioner) should any problem arise, so as to determine a line of action (consultation via telephone, attend the unit consultation or the A&E)

Some O-HDHUs have created a type of "home hospitalization" (U.65 at the Royal Decree 1277/2003). The physical, management and working definition as well as the physical and functional requisites are out of the scope of the publication. Moreover as there is not enough data on the quality and efficiency of this resource the integration of this healthcare modality on O-HDHUs should be considered on the review of this document.

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Annex 3. Resource sizing criteria.

1. Establishing the basic dimensions of the DHU healthcare facilities depends, on demography (population structure), epidemiology (morbidity), clinical factors (surgical criteria of the procedures of the service portfolio) and management (use of available capacity).

Introduction

It is a question, in all cases, of determining the needs by means of estimation of the expected demand and resource sizing adequation to these needs, according to a previously determined productivity profile.

2. In order to do so, there should be established, first, the estimate of the expected procedures which will be performed in the unit in one year.

Estimate of the expected number of procedures to be performed in one year.

In those units with a specifically allocated area of reference, this figure could be estimated by the statistical analysis of the population distribution and the projection on the chosen time frame.

Considering this population as a basis, the frequency of sessions (Fr. Ss.) should be determined, which will be defined as the rate of DH procedures per 1000 persons a year.

The expected number of DH procedures (DH Pr.) will thus be

$$\text{DH pr.} = \text{Population} \times \frac{\text{Fr. Ss.}}{1.000}$$

Where:

DH pr. is the total number of DH procedures performed in a year in the specific area of reference, and

Population number of inhabitants in that area

3. In practice, the estimation of these variables will depend on the available information. An example of a calculation is provided below.

Example of the calculation of the expected number of procedures to be performed in one year

Table A3.1. Example 1. Calculation of the expected number of DH procedures to be performed in a year.

Chapter 2 describes the DH trends both in the Spanish National Health Service as in international health systems. From this information, the expected number of DH procedures to be performed in a year could be calculated as follows:

- **Data sources**

The statistics on inpatient healthcare centres (www.msc.es/estadEstudios/estadisticas/estHospilInternado/inforAnual/home.htm), issued by the Ministry of Health and Consumer Affairs provides annual information on Day Hospitalization; however these data do not ply specific information about the different types of DHUs. Nevertheless, hospitals systematically collect data of the beds/chairs available and the procedures performed at O-HDHU, at specialized DHU for patients suffering form IHV/AIDS or medical-surgical unit and thus it is a kind of information which is available.

At any rate, it is important to take into account that there is an important index of variability, according to the hospitals service portfolio and the procedures performed on DHU in each of them.

Official population figures are available at the municipal census (www.ine.es/inebase/cgi/um?M=%2Ft20%2Fe260&O=inebase&N=&L) published by the Spanish Statistics Institute. The Institute also provides population projections for 2017 and 2060 (www.ine.es/inebase/cgi/um?M=%2Ft20%2Fp251&O=inebase&N=&L).

- **Calculation method**

From these data, the following may be drawn: on 2005, latest year for which the statistics are published, the total attendance at the so called “other” Day Hospital Units could be of 37% of inhabitants per year, estimating that at least one third will belong to day procedures performed at DHUs, so that it could be settled an attendance rate to polyvalent medical DHUs, to DHUs for patients suffering form HIV/AIDS and O-HDHU of around 25% of inhabitants per year.

Considering the upward trend of this kind of healthcare service, it could be forecast an attendance rate, within the same time frame and population estimation, of 50% of inhabitants per year.

Therefore, on an area of 250 000 inhabitants there will be an estimation of 12 500 DHUs treatments of which around 7 500 will be onco-haematologic procedures (30% of inhabitants per year) and the additional 5 000 medical procedures. The final calculation of beds/chairs necessary at a polyvalent medical DHU will depend on the distribution of the boxes in autonomous units and in those integrated in other units (as those for Pluripathologic patients).

4. On those DHUs without a specific area of reference, DH Pr. will be estimated by means of different kinds of data, which could be statistical - historical series- or economical - analysis of the market position versus rival units, business plans, etc.

5. In order to calculate the number of beds/chairs (B/Ch) necessary at the DHU to cope with the expected number of procedures to be performed in one year, it should be taken into account the following variables, which set the using profile of the productive capacity as the aim of planning:

- Available DHU time (ADHUT), in hours, which must agree with the established period of time in which procedures may be scheduled and with the effective operation time of the unit.

The average DHU time will also be defined as:

$$ADHUT = N^{\circ} \text{ of hours/day} \times N^{\circ} \text{ of days/week} \times N^{\circ} \text{ of weeks/year}$$

Where:

N^o of hours/day is the estimate number of working hours a day.

N^o of sessions/week is the estimate number of working days per week, and

N^o of weeks/year is the estimate number of weeks that the unit will work through the year.

Estimate of expected number of DH procedures to be performed in one year in units with no area of reference.

Calculation of the number of beds/chairs.

- Required time, in hours, to undergo scheduled (DHScPT):

$$DHScPT = ADHUT \times APrT$$

Where:

APrT is the average time, in hours, of procedures.

DH occupancy (DHO), will be a percentage of the ADHUT expressed as:

$$DHO = \left(\frac{DHScPT}{ADHUT} \right) \times 100$$

Thus,

$$B/Ch = \left(\frac{DHScPT}{ADHUT \times DHO} \right)$$

Table A3.2. Example 2. Calculation of the number of DH beds/chairs.

<p>On the basis of 12 500 DH procedures determined in example 1:</p> <ul style="list-style-type: none"> • DHU morning working shift (7 hours) • 5 days a week (Monday to Friday) • 50 weeks a year, • 80 % occupancy rate, and • 3 hours (180) as the average duration of procedures <p>then, the necessary number of beds/chairs is: 26,78 - 30^{1,2,3}</p> <p>On the same basis, 10 hour working shifts will mean: 18, 75 - 19 beds/chairs²</p> <hr/> <p><i>1 It should be pointed out that the aim of rounding up suggested in this example is to settle an additional security margin. From this point of view, planning implies a) setting the enough healthcare resource sizing so as to anticipate future demand (even though, as usual, it is difficult to foresee) and b) to settle the management aims intended to optimize the available capacity.</i></p> <p><i>2 The number of DH beds/chairs obtained should be distributed among autonomous DHUs and integrated units (within units for pluripathologic patients, for example)</i></p> <p><i>3 It may be suitable to differentiate between "polyvalent" units and Onco-Haematologic units, having the later a sizing of around 20 beds/chairs⁽³⁶⁾.</i></p>
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(36) 54% of hospitals with a population area > 500 000 inhabitants have an exclusively devoted O-HDHU. The average availability (chairs + beds) is 181.

6. In order to establish the number of consultation rooms in the unit the following variables should be considered:

- Number of treatments performed at DHU throughout a year (DHUT)
- Average number of consultations per treatment (N° Cons/T).
- The number of DH consultations (DHC) will be:

$$DHC = N^{\circ} \text{ Cons/T} \times DHUT$$

- Average time, in minutes, estimated on each consultation. (DHCT)
- The available DH consultation time (ADHCT) is expressed as:

$$ADHCT = N^{\circ} \text{ of days/year} \times N^{\circ} \text{ Cons. hours / day} \times 60$$

Where:

N° of days/year is the number of the unit working days,
and

N° Cons. hours/day is the number of DH consultation hours
per day

- Percentage of the occupancy level of DH consultation rooms (OLDHCons), which shows the effective use of the premises.

Thus the number of necessary consultation rooms can be calculated as follows:

$$C = \left(\frac{DHSC \times DHSCT}{ADHCT \times OLDHCons} \right)$$

Table A3.3. Example 3. Calculation of the number of consultation rooms.

**Example of
the
calculation
of the
number of
consultation
rooms**

For the 12 500 DH procedures considered in the previous examples, and assuming:

- 0,5 consultations per DH procedure
- 20' per consultation
- 247 working days.
- 6 hours a day.
- 80 % occupancy

the number of necessary consultation rooms will be 1.75 - 2

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Annex 4. Functional design programme

In relation with the development of ergonomic designs for premises, which include the sizing advised for the main premises of the unit, it is bellow included, for purposes of illustration, a functional design programme of a polyvalent medical unit with 10 beds/chairs and of an Onco-Haematological unit with 20 beds/chairs. These dimensions respond to 12 500 treatments/year in an acute hospital with a reference area of 250 000 inhabitants⁽³⁷⁾:

- MEDICAL POLYVALENT DAY HOSPITAL UNIT (DHU) WITH 10 BEDS/CHAIRS

Table A4.1. Functional design programme for a polyvalent medical DHU with 10 beds/chairs⁽³⁸⁾.

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
RECEPTION	1. Main waiting room	20	1	20	For 10 people and connected to the unit reception. Equipped taking into account lengthy sessions and with an adequate capacity directly related to the size of the DHU. Telephones and background music. Cold food and drinks vending machine.
	2. Public toilet.	8	1	16	According to the general organization of the unit. Toilets for visitors and patients. With washbasin and WC.
	3. Disabled toilet.	4	1	4	Integrated within the public toilets block. Disabled toilets for visitors and patients. With washbasin and WC.
	4. Reception.	18	1	18	Reception of patients and relatives. Administrative processes: registration and discharge. The counter should not represent a barrier and should be accessible to wheelchair users. Computers and telephones.
TOTAL RECEPTION AREA				58	

⁽³⁷⁾ See annex 3.

⁽³⁸⁾ Surfaces are expressed in m².

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
DAY HOSPITAL UNIT	5. Consultation room.	18	2	36	It includes exploration area and office. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	6. Nurse consultation room.	18	1	18	Same characteristics and facilities of the consultation room (5).
	7. Information office.	12	1	12	For patient and relatives information. Computers and telephones.
	8. Minor surgery room.	24	1	24	For minor surgery, apart from medical treatment and investigation units and recovery units. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	9. Patient toilets.	8	2	16	Between the entrance and the Day Hospital area. For patients. With washbasin and WC.
	10. Patient changing rooms.	6	2	12	By the patient toilets or within the patient toilet block. Changing room and lockers for personal belongings.
	11. Day Hospital area (common ward).	10	8	80	Cubicles for treatment administration and, if necessary, for patient recovery. Open-plan area, distributed guaranteeing direct visual control from the nurse station; with the possibility of closing off for privacy (never compromising patient safety).

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
					With chair or bed for treatment; windows with blocking devices and cleaning and airing positions. Power points and oxygen and vacuum connections at headboards. Integrated call and communication system with nursing staff. TV and music pre-installation. Computer connections. Stainless steel worktop, washbasin and elbow mixer taps with thermostat control (on the common ward for medical staff).
	12. Day Hospital area (private room).	14	2	28	With similar characteristics and facilities to the common ward (11), for patients to whom, due to their clinical condition or to the kind of procedure, isolation is recommended. It may have a toilet (with similar characteristics to 9) or not (in that case the patient toilets of the area will be used) If necessary, DH common equipment (crash cart) could be used.
TOTAL DAY HOSPITAL AREA				226	
NURSE STATION AND GENERAL UTILITY ROOMS	13. Counter and staff working area.	20	1	20	Located in the centre of the open area, so as to reduce distances and ease control. With support elements according to the type of work. Large counter with broad working area. It must allow direct visual control of all cubicles in the common ward. Adequate command and control, accessible to wheelchair users. Fitted with patient/nurse communication system via warning lights and buzzers. Pneumatic tube terminal. Safety and fire alarm control panel, gas detectors control panel. Computers and telephones.

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
	14. Clean utility room.	8	1	8	Storage for clean equipment, medicament preparation, with counter, fridge and medicine dispenser unit. Connected with the nurse station. Double sink unit.
	15. Laundry room.	6	1	6	For clean laundry. Area for laundry carts.
	16. Disposal equipment storeroom.	6	1	6	For small regular equipment. Area for supply carts with cyclic replacement system. Surfaces should be washable. Modular shelves higher than carts. Adequate area for the storage of salines.
	17. Equipment storeroom.	12	1	12	For apparatus and equipment. With metallic shelves to fit equipment.
	18. Kitchen.	8	1	8	Arrival of carts with dished up food and food preparation system. Adapted to the cooking and hospital distribution of food technologies. Double sink with draining board, fridge and microwave. Area for storage food carts.
	19. Dirty utility and waste disposal room.	10	1	10	For dirty laundry and waste disposal. Sink
	20. Cleaning equipment room.	4	1	4	For cleaning products and equipment.
TOTAL NURSE STATION AND UTILITY ROOMS AREA				74	

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
ADMINISTRATION AND STAFF AREAS	21. Staff toilets and changing rooms.	10	2	20	For DH staff. With similar characteristics to (2 and 9)
	22. Manager office.	12	1	12	Computer and telephone connections.
	23. Nurse manager office.	12	1	12	Computer and telephone connections.
	24. Meeting room / working room /library.	30	1	30	Staff working area, with computer and telephone connections.
	25. Resting room.	12	1	12	For staff resting and refreshment. Sink.
TOTAL ADMINISTRATION AREA				86	
TOTAL DAY HOSPITAL AREA				454	

General characteristics of the unit

The Day Hospital area will be will be mainly an open-plan area with visual control from the nurse station. However, design should allow a certain degree of independence of chairs/beds; two of them will be completely independent.

The area will include:

- Entrance, reception, information office and waiting room.
- Day hospital beds/chairs.
- Nurse station and utility rooms.
- Staff area.

The characteristics of a polyvalent medical unit are:

- Shared by the different hospital services and doctors, except from those who have their own specific areas.
- Nursing staff has a fundamental role on the coordination and organization of this area. They should be trained and qualified on the procedures and caring techniques of the processes they will be involved in.

- Day hospitalization will work independently, with its own nursing support units, offices, administration, patient and escorts areas.
- Day Hospital Unit should have direct access from the outside and it will be connected with the hospital inner circulation flows.
- It will be in constant connection with: Internal medicine outpatient consultation, neurology, pneumology and digestive medicine, rheumatology, alergology, pharmacy, radiodiagnostics, hospitalization and with the laboratory by means of mechanic transportation.
- It will also be communicated with the feeding distribution system and equipment distribution system.
- As in any other hospital area, patient's privacy will be respected. Patients, if they wish so, will be accompanied by an escort, during the recovery process.

• ONCO-HAEMATOLOGIC POLYVALENT DAY HOSPITAL UNIT (O-HDHU) WITH 20 BEDS/CHAIRS

Table A4.2. Functional design program for an O-HDHU with 20 beds/chairs.

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
RECEPTION	1. Main waiting room	40	1	40	For 10 people and connected to the unit reception. Equipped taking into account lengthy sessions and with an adequate capacity directly related to the size of the DHU. Telephones and background music. Cold food and drinks vending machine.
	2. Public toilet.	8	2	16	According to the general organization of the unit. Toilets for visitors and patients. With washbasin and WC.
	3. Disabled toilet.	4	1	4	Integrated within the public toilets block. Disabled toilets for visitors and patients. With washbasin and WC.
	4. Reception.	18	1	18	Reception of patients and relatives. Administrative processes: registration and discharge. The counter should not represent a barrier and should be accessible to wheelchair users. Computers and telephones.
TOTAL RECEPTION AREA				78	

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
DAY HOSPITAL UNIT	5. Consultation room.	18	2	36	It includes exploration area and office. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	6. Nurse consultation room.	18	1	18	Same characteristics and facilities of the consultation room (5).
	7. Information office.	12	1	12	For patient and relatives information. Computers and telephones.
	8. Minor surgery room.	24	1	24	For minor surgery, apart from medical treatment and investigation units and recovery units. Consultation room unit, stainless steel worktop, washbasin and elbow mixer taps with thermostat control. Individual lighting in exploration bed. Computers and telephones. Oxygen and vacuum connections.
	9. Patient toilets.	8	2	16	Between the entrance and the Day Hospital area. For patients. With washbasin and WC.
	10. Patient changing rooms.	4	2	8	By the patient toilets or within the patient toilet block. Changing room and lockers for personal belongings.
	11. Day Hospital area (common ward).	10	18	180	Cubicles for treatment administration and, if necessary, for patient recovery. Open-plan area, distributed guaranteeing direct visual control from the nurse station; with the possibility of closing off for privacy (never compromising patient safety).

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
					With chair or bed for treatment; windows with blocking devices and cleaning and airing positions. Power points and oxygen and vacuum connections at headboards. Integrated call and communication system with nursing staff. TV and music pre-installation. Computer connections. Stainless steel worktop, washbasin and elbow mixer taps with thermostat control (on the common ward for medical staff).
	12. Day Hospital area (private room).	14	2	28	With similar characteristics and facilities to the common ward (11), for patients to whom, due to their clinical condition or to the kind of procedure, isolation is recommended. It may have a toilet (with similar characteristics to 9) or not (in that case the patient toilets of the area will be used) If necessary, DH common equipment (crash cart) could be used.
TOTAL DAY HOSPITAL AREA				322	
NURSE STATION AND GENERAL UTILITY ROOMS	13. Counter and staff working area.	20	1	20	Located in the centre of the open area, so as to reduce distances and ease control. With support elements according to the type of work. Large counter with broad working area. It must allow direct visual control of all cubicles in the common ward. Adequate command and control, accessible to wheelchair users. Fitted with patient/nurse communication system via warning lights and buzzers. Pneumatic tube terminal. Safety and fire alarm control panel, gas detectors control panel. Computers and telephones.

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
	14. Clean utility room.	8	1	8	Storage for clean equipment, medicament preparation, with counter, fridge and medicine dispenser unit. Connected with the nurse station. Double sink unit.
	15. Laundry room.	6	1	6	For clean laundry. Area for laundry carts.
	16. Medicine preparation unit.	14	1	14	For special preparations. With pre-installation for a laminar flow cabinet and sink.
	16. Disposal equipment storeroom.	6	1	6	For small regular equipment. Area for supply carts with cyclic replacement system. Surfaces should be washable. Modular shelves higher than carts. Adequate area for the storage of salines.
	17. Equipment storeroom.	12	1	12	For apparatus and equipment. With metallic shelves to fit equipment.
	18. Kitchen.	8	1	8	Arrival of carts with dished up food and food preparation system. Adapted to the cooking and hospital distribution of food technologies. Double sink with draining board, fridge and microwave. Area for storage food carts.
	19. Dirty utility and waste disposal room.	10	1	10	For dirty laundry and waste disposal. Sink
	20. Cleaning equipment room.	4	1	4	For cleaning products and equipment.
TOTAL NURSE STATION AND UTILITY ROOMS AREA				84	

Area	Premises	Floor surf.	Num.	Total floor surf.	Observations: functional and technical characteristics
ADMINISTRATION AND STAFF AREAS	21. Staff toilets and changing rooms.	10	2	20	For DH staff. With similar characteristics to (2 and 9)
	22. Manager office.	12	1	12	Computer and telephone connections.
	23. Nurse manager office.	12	1	12	Computer and telephone connections.
	24. Meeting room / working room /library.	40	1	40	Staff working area, with computer and telephone connections.
	25. Resting room.	20	1	20	For staff resting and refreshment. Sink.
TOTAL ADMINISTRATION AREA				104	
TOTAL DAY HOSPITAL AREA				588	

General characteristics of the unit

The day hospital area will be will be mainly an open-plan area with visual control from the nurse station. However, design should allow a certain degree of independence of cubicles/beds; two of them will be completely independent.

The area will include:

- Entrance, reception, information office and waiting room.
- Day hospital beds/chairs.
- Nurse station and utility rooms.
- Staff area.

The specific characteristics of an Onco-Haematological Day Hospital Unit are:

- It will be used by oncologic patients (shared with medical oncology unit and clinical haematology).
- Nursing staff has a fundamental role on the coordination and organization of this area. They should be trained and qualified on the procedures and caring techniques of the processes they will be involved in.

- Day hospital units will work independently, with its own nursing support units, offices, administration, patient and escorts areas.
- Day Hospital Unit should have direct access from the outside and it will be connected with the hospital inner circulation flows.
- It will be in constant connection with: pharmacy, radiodiagnostics, hospitalization and with the laboratory by means of mechanic transportation.
- It will also be communicated with the feeding distribution system and equipment distribution system.
- As in any other hospital area, patient's privacy will be respected. Patients, if they wish so, will be accompanied by an escort, during the recovery process.

Annex 5. Definitions

Accreditation: *“Authorization to allow data or net system to process sensitive information and determination of the degree in which both design and the characteristics of the system meet the pre-established technical safety requirements”.* Accreditation is a voluntary process by which a healthcare centre undergoes an external assessment which establishes its level in accordance to a set of standards settled.

Authorization terms: Qualitative and quantitative requirements that healthcare centres, services and institutions must observe in order to be authorized by the medical administration, aimed at guaranteeing that they have the appropriate technical and human resources and facilities to provide adequate healthcare services.

Authorization: Healthcare authorization: administrative resolution authorizing, according to the specific regulations, a healthcare centre, service or institution its installation, operation, modification of its healthcare activities and, where appropriate, its closure.

Cancellation percentage: % [(cancellations / scheduled patients)].

Clinical documentation: All data, of whichever form, class or type, which may allow providing or amplifying knowledge on a person’s physical and health condition, or on the form of maintaining, caring for, improving or recovering it. (Art. 3 of Act 41/2002 on “Ley básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica” -Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information-).

Clinical record: Set of documents which include the data, the assessments and all kinds of information regarding the situation and the clinical evolution of a patient through the care process. It includes the identification of the doctors and other staff which have participated on the healthcare process. (Art. 3 of Act 41/2002 on “Ley básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica” -Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information-).

Code of ethics: set of moral rules governing professional conduct regarding

patient care services of healthcare centres.

Day Hospitalization (DH): Healthcare modality intended to treat and care patients who have to undergo diagnostic and therapeutic procedures which require medical or nurse attention but do not imply hospitalization.

Day hospital bed/chair: Specific area for healthcare attention, either for diagnosis, clinical investigation and/or multiple explorations, as well as for treatments that cannot be performed at outpatient consultation, but which do not justify hospitalization. A&E service boxes are not considered as DH.

Day Hospital Unit (DHU): Healthcare unit dedicated, under the supervision or instructions of a specialized doctor, to the treatment and care of patients who must undergo therapeutic or diagnostic treatment that require short post operative medical and nursing care, but do not require hospitalization.

From a management point of view, DHU are independent within the healthcare centre to which they belong to. The unit main activity is to provide healthcare to patients treated under this type of health service, it has specific resources and an independent coordinator for its management, being thus different from integrated DHUs.

DHUs are intermediate units that carry out their activity for final health services.

Discharge report: Report issued by the manager doctor of a healthcare centre upon completion of the patient healthcare procedures or his/her referral to other healthcare centre which specifies the patient's details, a summary of his/her clinical record, a description of the healthcare provided, the diagnosis and the therapeutic recommendations. Other similar terms used as synonyms are: Clinical discharge report, Report of medical discharge. (Art. 3 of Act 41/2002 on "Ley básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica" -Patient Autonomy Rights and Obligations regarding Clinical Documentation and Information-; Ministerial Order of the Ministry of Health of September 6, 1984).

DH index: % [(DHU sessions/total number of stays)] (DH and stays for surgery are not included). It evaluates the global impact of DHU on the conventional hospitalization activity of a hospital.

DH patient: Patient that has to undergo diagnostic and therapeutic procedures which require medical or nurse attention but do not imply hospitalization.

Day Surgery: Surgical therapeutic and diagnostic procedures, performed with general, loco-regional or regional anaesthetic, with or without sedation, which imply short post-operative care, and thus do not require hospitalization.

Healthcare centre: set of technical resources and premises where qualified staff provide healthcare service designed to improve patients' health.

Hotel: Accommodation in hotels, without healthcare attention, for outpatients due to social, familiar or geographic reasons.

Informed consent: Voluntary, conscious and free conformity statement of a patient, made in full possession of his/her faculties, after receiving the appropriate information, which will allow an operation or a procedure.

Inpatient: Patient requiring an overnight stay in hospital.

IT: Set of related processes, automatic or not, which allow the administration and provide support to the different activities performed at healthcare centres, services and institutions, as well as the treatment and the exploitation of the data that these processes may bring out.

Outpatient consultation area: Area of a hospital or of a Day Surgery unit, either public or private, devoted to outpatient care.

Outpatient procedure: Procedure performed in a consultation room or in a therapeutic or diagnosis area, of a public or private hospital, which does not require hospitalization.

Outpatient procedure: Procedure performed in a consultation room with the adequate design, equipment and safety conditions.

Outpatient: Patient treated only at outpatient consultation, including ambulatory procedures, interventional radiology, radiotherapy, oncology, renal dialysis, etc.

Patient hotel: Hotel accommodation for outpatients in which professional care is available on an on-call basis.

Patient record: Selected data on patients and their relation with the healthcare centre as a result of a healthcare process.

Polyvalent DHU: DHU which performs general procedures such as aspirations, biopsies, blood extraction, minor surgery care, drainages, intravenous perfusion, etc. to patients suffering from different pathological episodes and undergoing different procedures.

Quality audit: (Audit) “Process in which the books, accounts and records of a company are examined to verify its financial statements and if receipts are duly submitted”. Methodic and independent examination conducted to determine if quality related activities and results meet the pre-established regulations and to check that these regulations are efficiently fulfilled and are adequate to meet the set objectives.

Rate of transfusion reactions: % [(transfusion reaction / number of procedures which have implied blood or haemoderivatives transfusion)].

Register of healthcare centres, services and institutions: Record of all authorizations for operation, modification and, when needed, installation and closure of healthcare centres, services and institutions granted by the corresponding healthcare authorities.

Service portfolio: Set of techniques, technologies or procedures, implying any of the methods, activities and resources based on knowledge and scientific experience, by which a healthcare centre, service or institution provide healthcare services.

Short stay: Stay at conventional hospitalization on a time frame of 24-72 hours.

Specialized DHU: DHU that deal with a determined set of procedures (onco-haematologic units or those that treat patients infected with IHV/AIDS, for example)

Annex 6. Abbreviations

CMBD. Coding Minimum Basic Data Set.

DH. Day Hospitalization.

DHU. Day Hospital Unit.

DS. Day Surgery.

EESRI. Spanish acronym for the Statistics of Hospitals.

INSALUD. Spanish acronym for the former Spanish National Health Institute.

NHS. National Health Service (England, United Kingdom)

O-HDHU. Onco-Haematologic Day Hospital Unit.

SEOM Spanish acronym for the Spanish Society of Medical Oncology.

SEEO Spanish acronym for the Spanish Society of Nursing Oncology.

WHO. World Health Organization.

