Comparative Study on Quality Systems in Organ Donation at European Hospitals

ODEQUS Survey

September, 2011
The Organ Donation European Quality System, ODEQUS, is a European project co-financed by the European Agency for Health and Consumers (EAHC 20091108). The project started in October 2010 and it aims at identifying Quality Criteria (QC) and developing Quality Indicators (QI) in the 3 different types of organ donation: Donation after Brain Death (DBD), Donation after Cardiac Death (DCD) and Living Donation (LD).

The aim of the present comparative study is to know what the European hospitals are doing concerning quality in the donation process. Although this is not a scientific document, the results of this Survey can give us a clue to the current use of quality systems in organ donation in different European countries.

**Material and Methods**

The Survey was designed by a consortium of 12 European partners and includes 3 different requests:

1. General information of the hospital and person who answers the survey.

2. General overview of the hospital (if it has a transplant program or not, number of transplant coordinators, number of ICU beds, number of actual DBD donors, etc.).
3. Implementation of a quality system in the hospital, in the transplant program and/or the donation program.

The survey was distributed to all project partners to be applied in at least 3 hospitals performing DBD, 3-4 hospitals performing DCD and 3-4 hospitals performing LD, in each partner country.

We received a total of 90 surveys: 6 from France, 6 from Italy, 35 from Poland, 5 from Portugal, 5 from Croatia, 7 from Romania, 12 from Spain, 2 from Germany, 7 from England and 4 from Sweden. All ODEQUUS partners, except Austria responded to the survey.

<table>
<thead>
<tr>
<th>Country</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRANCE</td>
<td>6</td>
</tr>
<tr>
<td>ITALY</td>
<td>6</td>
</tr>
<tr>
<td>POLAND</td>
<td>36</td>
</tr>
<tr>
<td>PORTUGAL</td>
<td>5</td>
</tr>
<tr>
<td>ROMANIA</td>
<td>7</td>
</tr>
<tr>
<td>SPAIN</td>
<td>12</td>
</tr>
<tr>
<td>GERMANY</td>
<td>2</td>
</tr>
<tr>
<td>ENGLAND</td>
<td>7</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>4</td>
</tr>
<tr>
<td>CROATIA</td>
<td>5</td>
</tr>
<tr>
<td>AUSTRIA</td>
<td>0</td>
</tr>
</tbody>
</table>
**Results**

The preliminary survey report includes the information from 90 hospitals from 10 European Countries. According to the data sent, 59% of the hospitals have a transplant program and all of them reported activity in organ donation, mainly DBD (84%). 41.4% of the hospitals have a Quality Plan in Organ donation and 63% of them are used to measure the percentage of family consent, the number of actual DBD and the number of organs recovered. The tools used to measure quality are: Self-assessment survey (78.4%), Quality indicators (64.9%) and Audits (54.1%). 80% of the non-transplant hospitals reported have no quality plan in organ donation and 45% of the hospitals performing transplants do not have a quality program in organ donation. 60.6% of the Quality in Organ Donation programs are included in a general Quality program promoted by the National Transplant Organizations.

The target group of this Survey is a sample of European Hospitals selected by ODEQUS experts in the countries participating in this project. The percentages appearing on this analysis make reference to this specific target group:

1. University Hospital Zagreb
   Croatia
2. Clinical Hospital Center (Systers of Mercy)
   Croatia
3. University Hospital Rijeka
   Croatia
4. University Hospital Osijek
   Croatia
5. Clinical Hospital Bubrava
   Croatia
6. Hospital Universitario Son Espases
   Spain
7. Hospital Universitario Ramon i cajal
   Spain
8. Puerta del Hierro Majadahonda
   Spain
9. Hospital General La Paz
   Spain
10. Complejo Universitario Santiago de Compostela
    Spain
11. Complejo Asistencial Universitario de Burgos
    Spain
12. Hospital Universitario A Coruña
    Spain
13. Hospital 12 de Octubre
    Spain
14. Hospital General Universitario Gregorio Marañon
    Spain
15. Hospital Clinico San Caralos
    Spain
16. Hospital Carlos Haya
    Spain
17. Hospital Clinic of Barcelona
    Spain
18. Fundeni Clinical Institute -Center of General Surgery
    Romania
19. Clinic Judetean de Urgente, Sf Spiridon Iasi
    Romania
20. Clinic Institute of Urology and Renal
    Romania
21. Emergency Hospital of Oradea
    Romania
22. Clinical Country Hospital
    Romania
23. Clinical Emerghency Hospital of Bucharest
24. Fundeni Clinical Institute
25. University City Hospital
26. Azienda Ospedaliero Universitaria Pisana
27. Azienda Ospedaliero Universitaria di Parma
28. Ao ospedali Riuniti Di Bergamo
29. San Gerardo Hospital
30. Azienda Ospedaliera Padova
31. CHD Hospital
32. Centre Hospitalier Universitaire d'Angers
33. Foch Hospital
34. Hospices Civils de Lyon
35. COCHIN Hospital
36. Delafontaine Hospital
37. Upppsala University Hospital
38. Southern General Hospital in Stockholm
39. Skane University Hospital Malmö
40. Karonlinksa University Hospital
41. Royal Victoria Hospital
42. Belfast City Hospital
43. Royal Infirmary of Edinburgh
44. Southern General Hospital
45. Kings College Hospital
46. Imperial College Healthcare NHS Trust
47. Royal Gwent Hospital
48. 4 WISK Hospital
49. Children's Regional Hospital Kielce
50. children's Hospital Olsztyn
51. Samodzielny Publiczny Zaklad Opieki Zdrowotnej w Dzialdowie
52. Szpital Miejski im. J. Brudzinskiego w Gdyni
53. Szpital Powiatowy im. Pralata J. Glowatzkiego
54. W.S.S. Im. Gromkowskiego
55. Szpital Wojewódzki im. Jana Pawla II
56. Hospital from Poland
57. Hospital from Poland
58. Samodzielny Szpital Wojewódzki im. Mikolaja Kopernika
59. SPZOO Kóćian
60. SP Zoz Kedzierzyn-Kozle
61. ZOZ Leczyca
62. Szpital Wojewódzki im. Sw. Lukasza SP ZOZ
63. Miedzyleski Szpital Specjalistyczny
64. Team Health Care Facilities in Oswiecim
65. Podhalaanski Szpital Specjalistyczny
66. Szpital Powiatowy
67. Wojewódzki Szpital im. Sw. Ojca Pio w Przemyślu
68. SP ZOZ Rydultowy
69. Szpital Wojewódzki nr 2 w Rzeszowie
70. Samodzielny Publiczny Szpital Kliniczny Nr 1
71. Wojewódzki Szpital Specjalistyczny
72. Wojewódzki Szpital w Tarnobrzegu
73. 114 Szpital Wojskowy SP ZOZ
74. Akademicki Szpital Kliniczny, University of Wroclaw
75. Wojewódzki Szpital Zespolony
76. SPZZOZ Sandomierz
77. Szpital Specjalistyczny SP ZOZ w Sanoku
78. Siedlecki Szpital Specjalistyczny
79. SP ZOZ – Drabowie Taranowskiej
80. Wojewódzki Szpital Specjalistyczny im. F. Chopina w Rzesowie
81. Szpital Miejski im. J. Brudzinskiego w Gdyni
82. Samodzielny Publiczny Zakład Opieki Zdrowotnej
83. SP ZOZ Gżycko
84. University Hospital Freibug
85. University of Tübingen
86. Hospital São João
87. Hospital São José
88. Hospital São Francisco Xavier
89. Hospital Universitário de Coimbra
90. Hospital Santa Maria
In order to identify the types of hospitals that answered the survey next question was made: Does your hospital run a transplantation program and what donation programs does it run?

<table>
<thead>
<tr>
<th>Partner</th>
<th>Graphic</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td>From the total hospital from France that answered the survey 50% have transplant programs, and 50% doesn’t. All of them have brain death donation programs, 50% living donation and only 35% have death after cardiac arrest donation. The transplant centers transplant all type of organs.</td>
</tr>
<tr>
<td>Italy</td>
<td><img src="image2.png" alt="Diagram" /></td>
<td>From the total hospital from Italy that answered the survey 83% have transplant programs, for all type of organs, all with brain death donation, 83% with LD and 33% with DCD.</td>
</tr>
<tr>
<td>Poland</td>
<td><img src="image3.png" alt="Diagram" /></td>
<td>From the total hospital from Poland that answered the survey 42% don’t have transplantation programs; all of them perform DBD, 2% LD and no DCD. The transplant programs include all type of organs, except the bowel.</td>
</tr>
</tbody>
</table>
From the total hospital from Portugal that answered the survey 80% have transplant programs, for all type of organs, all have DBD, 60% LD and 20% said to have DCD, I the hospitals who answered this were thinking in tissue donation only, because the DCD program hasn’t started yet.

From the total hospital from Romania that answered the survey 100% of the participant hospitals have transplantation programs, for kidney, heart and pancreas, 71% with LD, 425 with DBD and 0 with DCD.

From the total hospital from Spain that answered the survey 91.6% have transplantation programs, for all type of organs; 66% with LD 100% with DBD and 33% with DCD.

From the total hospital from England that answered the survey 57% have transplantation programs, for kidney, liver, pancreas and bowel, all with DBD and DCD and 57% with LD.
Sweden

From the total hospital from Sweden that answered the 75% have transplantation programs, for kidney liver and pancreas, all with DBD and 50% with LD.

Germany

For Germany, 100% have transplantation programs, for all type of organs, and remember that from Germany we only recieved 2 surveys; 100% with LD and 50% with DBD.

Croatia

From the total hospital from Croatia that answered the survey 80% stating yes for transplantation programs for kidney liver and heart, 40% with LD, 100% with DBD and 20% with DCD.
Has your hospital appointed persons responsible for deceased organs donation program?

90% said yes; from these, 25% have both in part time and full time, and 75% has only one type, being 25% full time and 75% part-time, meaning that most hospitals have only persons in part time.

What's the title given by the hospital to those responsible for deceased organ donation?

- **FRANCE**: Hospital Coordinator
- **PORTUGAL**: Transplant Coordinator
- **ROMANIA**: 25% Transplant Coordinator
- **SPAIN**: Transplant Coordinator
- **GERMANY**: Transplant Agent
- **ENGLAND**: Specialist nurse-organ donation
- **SWEDEN**: Transplant/donor Coordinator
- **CROATIA**: Hospital Transplant Coordinator

Has your hospital created a Quality Department? Is there a Quality Plan developed in your hospital?

80.9% said to have a quality department in their hospital, and 78.2% said that they actually have a quality plan in the hospital.
- Is organ donation referred in the quality plan?

3.4 Is organ donation referred in the quality plan?

- Only 41.4% of the total hospital have organ donation referred in the quality plan. From these, 71.8% have all three quality objectives referred in the quality plan (Number Actual DBD, % Family consent, Numbers of Organs Recovered), 15.6% have two of them, which are the number of actual DBD and the % of family consent, and 12.5% have only one objective referred, which is the number of actual DBD.

- Do you make use of any quality measurement tools in the organ donation process?

**QUALITY MEASUREMENT IN ORGAN DONATION PROCESS**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessment survey</td>
<td>78.4%</td>
</tr>
<tr>
<td>Quality indicators</td>
<td>64.9%</td>
</tr>
<tr>
<td>Audits</td>
<td>54.1%</td>
</tr>
</tbody>
</table>

53.8% said that they use only for donation after brain death, and the majority uses the self-assessment survey, 64.9% uses quality indicator and 54.1% audit; some of them use more than one tool.

- What quality indicators have been used in your hospital?

3.10 What quality indicators have been used in your hospital?

- Almost 50% said they use structure indicators, almost 30% uses outcome indicators, and 20% process indicators.
In this chart we can see that almost 50% don’t use any quality indicator, 22% uses only one, and is a structure indicator, 16% use all three and 13% uses two of them, structure and outcome.

- Has the hospital been granted any quality certification?

55% said yes, but in only 18.9% the organ donation department acquired any kind of quality certification.

63.8% of the hospitals said that the quality in organ donation is part of the quality program promoted by the national transplant organization.

- Has the Transplant department been granted any type of Quality certification?

Only 21.6% of the hospitals have the transplant department with a quality certification.
Has the hospital an organ donation in Quality plan?

If we analyze the percentage of hospitals with organ donation in quality plan and separate the ones who have transplant programs and those who haven’t, we can see, that, without the transplant activity, only 20% have a quality plan for organ donation, whereas 55% in the hospitals with transplant programs have donation in quality program.

This is the outcome we were expecting, and we believe that this project can really be helpful for the hospitals without transplant programs.
Conclusions

The Survey results shows that most of the participant hospitals have been implementing a Quality Plan but only 41.4 % of the hospitals have the organ donation process included in the mentioned hospital quality plan. There is no homogeneity between the hospitals regarding the tools used to measure quality in the donation process. One of the most important finding was the relationship between the National Quality Program in organ donation lead by the National Transplant Offices and the implementation of it inside of the hospitals.

In summary, the Survey results can be listed as follows:

1. Almost all hospitals have a Quality Department (80,9%) and Quality Plan (78,2%)
2. 41,4% of the hospitals referred Organ donation in the Quality Plan and the % is higher in transplant hospitals.
3. 71,8% of the hospitals referred at least 3 organ donation objectives in the Quality Plan. (Number Actual DBD, % Family consent and Organs Recovered)
4. The self-assessment survey is the tool more used to measure organ donation process
5. 48,2% of the hospital doesn't use quality indicators in organ donation.
6. Structural and outcome indicators are the most frequently used.
7. Quality in Organ donation is part of the Quality program promoted by the National Transplant Organization in 63,8 % of the hospitals.
8. 18,9% of the hospitals have quality certification for organ donation.