

The Danish Registry on Regular Dialysis and Transplantation

Quarterly report Third quarter 2011

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Table 1.1: Number of interventions per time period from the production dataset

	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Total	48596	2467	476	496	342	
610 - TX	5219	232	52	61	24	
310 - HD	14924	746	142	144	117	
510 - PD	9287	392	88	88	63	
Other interventions (total):	19166	1097	194	203	138	
100 - Ude af system	212	60	11	8	7	
110 - Genvunden funktion	489	58	9	7	6	
120 - Overført/Send til	5813	161	36	32	16	
130 - Overført/Modtaget fra	705	194	62	51	53	
550 - Peritonitis	3973	260	18	32	22	
620 - Nyrestart	4818	226	38	51	19	
630 - Akut rejektion	1008	79	9	12	5	
650 - Grafftab	2148	59	11	10	10	

Table 1.2: Number of valid interventions per time period, which are used for analysis

	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Total	48036	2422	458	482	332	
610 - TX	5117	230	52	59	24	
310 - HD	14850	737	136	139	114	
510 - PD	9189	378	86	87	61	
Other interventions (total):	18880	1077	184	197	133	
100 - Ude af system	212	60	11	8	7	
110 - Genvunden funktion	489	58	9	7	6	
120 - Overført/Send til	5711	160	34	31	16	
130 - Overført/Modtaget fra	673	188	59	50	53	
550 - Peritonitis	3949	253	17	32	18	
620 - Nyrestart	4720	224	38	49	19	
630 - Akut rejektion	994	77	7	11	4	
650 - Grafftab	2132	57	9	9	10	

Table 1.3: Number of interventions from the production dataset per time period, which are excluded from the analyses

	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Total	560	45	18	14	10	
610 - TX	102	2	0	2	0	
310 - HD	74	9	6	5	3	
510 - PD	98	14	2	1	2	
Other interventions (total):	286	20	10	6	5	
100 - Ude af system	0	0	0	0	0	
110 - Genvunden funktion	0	0	0	0	0	
120 - Overført/Send til	102	1	2	1	0	
130 - Overført/Modtaget fra	32	6	3	1	0	
550 - Peritonitis	24	7	1	0	4	
620 - Nyrestart	98	2	0	2	0	
630 - Akut rejektion	14	2	2	1	1	
650 - Grafftab	16	2	2	1	0	

Table 1.4: Number of interventions from the production dataset per time period, which are excluded from the analyses due to invalid CPR numbers (EX2), patients having no treatment interventions at all (EX3), illogical courses of HD, PD, TX or recovery, or illogical administrative courses (EX4 - EX6, EX8, EX9, see list to table 1.5 below)

	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Total	82	20	8	6	5	
610 - TX	12	0	0	0	0	
310 - HD	9	3	1	4	0	
510 - PD	15	4	1	0	0	
Other interventions (total):	46	13	6	2	5	
100 - Ude af system	0	0	0	0	0	
110 - Genvunden funktion	0	0	0	0	0	
120 - Overført/Send til	17	1	1	0	0	
130 - Overført/Modtaget fra	5	5	2	0	0	
550 - Peritonitis	6	4	0	0	4	
620 - Nyrestart	10	0	0	0	0	
630 - Akut rejektion	3	1	2	1	1	
650 - Grafftab	5	2	1	1	0	

Table 1.5: Changes since last quarterly report

	<2010	2010	2011_1	2011_2	2011_3	2011_4	Total
Number of new patients (included now) with their first intervention in:	2	6	14	52	66		140
Number of new patients (excluded now) with their first intervention in:	0	1	0	0	1		2
Number of patients excluded before, but included now, with their first intervention in:	10	0	0	0	0		10
Number of patients* included before, but excluded now, with their first intervention in:	8	1	0	0	0		9

(*) See corresponding list in section "Additional listings" below.

Descriptive tables

Table 2: Centre overview

List of dialysis centres	Code	Region (where centre is placed)
Rigshospitalet (RH)*	1301	Hovedstaden
Herlev	1516	Hovedstaden
Hillerød	2000	Hovedstaden
Roskilde	2501	Sjælland
Holbæk	3000	Sjælland
Nykøbing F	3500	Sjælland
Odense*	4202	Syddanmark
Sønderborg	5001	Syddanmark
Esbjerg	5501	Syddanmark
Fredericia	6007	Syddanmark
Holstebro	6501	Midtjylland
Skejby*	7026	Midtjylland
Viborg	7601	Midtjylland
Aalborg	8001	Nordjylland

* Centres are current transplantation centres as well.

Notes to table:

Centres are ordered by SKS codes.

Indicators

Indicator 1

Table 3.1: Prepared start of dialysis treatment in Denmark. Numbers of patients are presented unless indicated otherwise.

Time reference: date of first dialysis intervention

Denmark	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	1354	605	118	123	65	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	1354	605	118	123	65	.
Meeting indicator criteria (4)	658	324	55	65	35	.
Estimated proportion (5)	48.6	53.6	46.6	52.8	53.8	.

Notes to table:

(1) Number of patients with their first reported dialysis intervention after December 31st, 2007 in Denmark (information about date and place must be available). To count as first, the dialysis intervention has to be the first and reported or marked as the first in the database.

(2) Criteria for data completeness ((2) = (3) / (1)). Patients are excluded from the analyses if there is:
 a) no information about *planlagt/elektivt etableret dialyseadgangsvej*, or
 b) no information about type of *dialyseadgangsvej*.

(3) Number of patients with their first dialysis intervention during the time period and complete data.

(4) Number of patients where the first dialysis intervention was prepared.

(5) Proportion of patients where the first dialysis intervention was prepared = (4) / (3).

Table 3.2: Prepared start of dialysis treatment, by centre.

Time reference: date of first dialysis intervention

Rigshospitalet	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	180	65	23	13	10	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	180	65	23	13	10	.
Meeting indicator criteria (4)	69	29	13	5	5	.
Estimated proportion (5)	38.3	44.6	56.5	38.5	50.0	.

Herlev	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	138	77	19	22	11	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	138	77	19	22	11	.
Meeting indicator criteria (4)	64	39	8	10	7	.
Estimated proportion (5)	46.4	50.6	42.1	45.5	63.6	.

Hillerød	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	126	46	12	15	13	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	126	46	12	15	13	.
Meeting indicator criteria (4)	60	28	5	12	7	.
Estimated proportion (5)	47.6	60.9	41.7	80.0	53.8	.

Roskilde	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	61	32	8	3	4	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	61	32	8	3	4	.
Meeting indicator criteria (4)	27	22	5	3	3	.
Estimated proportion (5)	44.3	68.8	62.5	100.0	75.0	.

Holbæk	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	86	50	9	15	5	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	86	50	9	15	5	.
Meeting indicator criteria (4)	28	28	5	6	1	.
Estimated proportion (5)	32.6	56.0	55.6	40.0	20.0	.

Nykøbing F	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	25	3	5	2	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	39	25	3	5	2	.
Meeting indicator criteria (4)	21	15	0	2	0	.
Estimated proportion (5)	53.8	60.0	0.0	40.0	0.0	.

(Table cont.)

Table 3.2, cont.: Prepared start of dialysis treatment, by centre.

Odense	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	103	59	.	.	.	.
Data completeness (2)	100.0	100.0	.	.	.	.
Actual data basis (3)	103	59	.	.	.	.
Meeting indicator criteria (4)	40	19	.	.	.	.
Estimated proportion (5)	38.8	32.2	.	.	.	.

Sønderborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	27	.	1	.	.
Data completeness (2)	100.0	100.0	.	100.0	.	.
Actual data basis (3)	39	27	.	1	.	.
Meeting indicator criteria (4)	20	16	.	0	.	.
Estimated proportion (5)	51.3	59.3	.	0.0	.	.

Esbjerg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	21	3	4	1	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	39	21	3	4	1	.
Meeting indicator criteria (4)	24	14	1	1	1	.
Estimated proportion (5)	61.5	66.7	33.3	25.0	100.0	.

Fredericia	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	91	24	6	7	2	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	91	24	6	7	2	.
Meeting indicator criteria (4)	53	16	3	5	2	.
Estimated proportion (5)	58.2	66.7	50.0	71.4	100.0	.

(Table cont.)

Table 3.2, cont.: Prepared start of dialysis treatment, by centre.

Holstebro	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	87	37	.	.	.	.
Data completeness (2)	100.0	100.0	.	.	.	.
Actual data basis (3)	87	37	.	.	.	.
Meeting indicator criteria (4)	29	16	.	.	.	.
Estimated proportion (5)	33.3	43.2	.	.	.	.

Skejby	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	180	64	17	14	5	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	180	64	17	14	5	.
Meeting indicator criteria (4)	128	40	6	7	5	.
Estimated proportion (5)	71.1	62.5	35.3	50.0	100.0	.

Viborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	69	22	8	12	6	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	69	22	8	12	6	.
Meeting indicator criteria (4)	42	7	2	7	0	.
Estimated proportion (5)	60.9	31.8	25.0	58.3	0.0	.

Aalborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	114	54	10	12	6	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	114	54	10	12	6	.
Meeting indicator criteria (4)	52	34	7	7	4	.
Estimated proportion (5)	45.6	63.0	70.0	58.3	66.7	.

Notes to tables:

(1) Number of patients with their first reported dialysis intervention after December 31st, 2007 in Denmark (information about date and place must be available). To count as first, the dialysis intervention has to be the first and reported or marked as the first in the database.

(2) Criteria for data completeness ((2) = (3) / (1)). Patients are excluded from the analyses if there is:
a) no information about *planlagt/elektivt etableret dialyseadgangsvej*, or
b) no information about type of *dialyseadgangsvej*.

(3) Number of patients with their first dialysis intervention during the time period and complete data.

(4) Number of patients where the first dialysis intervention was prepared.

(5) Proportion of patients where the first dialysis intervention was prepared = (4) / (3).

Indicator 2

Table 4.1: Time period between registration at a nephrology department and start of dialysis treatment in Denmark. Numbers of patients are presented unless indicated otherwise.

Time reference: date of first (registered) dialysis intervention

Denmark	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	1346	602	118	123	64	.
Data completeness (2)	99.8	100.0	100.0	100.0	100.0	.
Actual data basis (3)	1343	602	118	123	64	.
Meeting indicator criteria (4)	857	431	86	91	45	.
Estimated proportion (5)	63.8	71.6	72.9	74.0	70.3	.

Notes to table:

(1) Number of patients with their first reported dialysis intervention after December 31st, 2007 in Denmark (information about date and place must be available). To count as first, the dialysis intervention has to be the first and reported or marked as the first in the database. Furthermore, patients with renal transplantation (TX) before their first dialysis are excluded.

(2) Criteria for data completeness ((2) = (3) / (1)). Patients are excluded from the analyses if:
 a) there is no information about *første journalnotat*, or
 b) the date of *første journalnotat* is after the date of first registered dialysis intervention.

(3) Number of patients with their first dialysis intervention during the time period and complete data.

(4) Number of patients who had an early referral for the first dialysis treatment.

(5) Proportion of patients who had an early referral for the first dialysis treatment = (4) / (3).

OBS! Per September 15, 2010:

Please notice, that the databasis for Indicator 2 now is similar to the databasis for Indicator 1. Furthermore, patients with renal transplantation (TX) before their first dialysis are excluded. The results for Indicator 2 in the second and third quarterly DNSL report (2010) may therefore not correspond to each other.

Table 4.2: Time period between registration at a nephrology department and start of dialysis treatment, by centre.

Time reference: date of first (registered) dialysis intervention

Rigshospitalet	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	179	65	23	13	10	.
Data completeness (2)	98.3	100.0	100.0	100.0	100.0	.
Actual data basis (3)	176	65	23	13	10	.
Meeting indicator criteria (4)	116	43	15	10	7	.
Estimated proportion (5)	65.9	66.2	65.2	76.9	70.0	.

Herlev	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	134	76	19	22	10	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	134	76	19	22	10	.
Meeting indicator criteria (4)	105	54	15	20	9	.
Estimated proportion (5)	78.4	71.1	78.9	90.9	90.0	.

Hillerød	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	126	46	12	15	13	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	126	46	12	15	13	.
Meeting indicator criteria (4)	59	23	9	11	7	.
Estimated proportion (5)	46.8	50.0	75.0	73.3	53.8	.

Roskilde	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	61	32	8	3	4	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	61	32	8	3	4	.
Meeting indicator criteria (4)	23	16	4	2	2	.
Estimated proportion (5)	37.7	50.0	50.0	66.7	50.0	.

Holbæk	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	86	50	9	15	5	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	86	50	9	15	5	.
Meeting indicator criteria (4)	50	35	9	9	5	.
Estimated proportion (5)	58.1	70.0	100.0	60.0	100.0	.

Nykøbing F	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	25	3	5	2	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	39	25	3	5	2	.
Meeting indicator criteria (4)	25	21	1	2	2	.
Estimated proportion (5)	64.1	84.0	33.3	40.0	100.0	.

(Table cont.)

Table 4.2, cont.: Time period between registration at a nephrology department and start of dialysis treatment, by centre.

Odense	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	103	58	.	.	.	.
Data completeness (2)	100.0	100.0	.	.	.	.
Actual data basis (3)	103	58	.	.	.	.
Meeting indicator criteria (4)	66	42	.	.	.	.
Estimated proportion (5)	64.1	72.4	.	.	.	.

Sønderborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	26	.	1	.	.
Data completeness (2)	100.0	100.0	.	100.0	.	.
Actual data basis (3)	39	26	.	1	.	.
Meeting indicator criteria (4)	24	23	.	0	.	.
Estimated proportion (5)	61.5	88.5	.	0.0	.	.

Esbjerg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	39	21	3	4	1	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	39	21	3	4	1	.
Meeting indicator criteria (4)	24	18	2	4	0	.
Estimated proportion (5)	61.5	85.7	66.7	100.0	0.0	.

Fredericia	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	91	24	6	7	2	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	91	24	6	7	2	.
Meeting indicator criteria (4)	69	18	5	6	1	.
Estimated proportion (5)	75.8	75.0	83.3	85.7	50.0	.

(Table cont.)

Table 4.2, cont.: Time period between registration at a nephrology department and start of dialysis treatment, by centre.

Holstebro	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	87	37	.	.	.	.
Data completeness (2)	100.0	100.0	.	.	.	.
Actual data basis (3)	87	37	.	.	.	.
Meeting indicator criteria (4)	58	30	.	.	.	.
Estimated proportion (5)	66.7	81.1	.	.	.	.

Skejby	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	178	64	17	14	5	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	178	64	17	14	5	.
Meeting indicator criteria (4)	118	45	14	8	4	.
Estimated proportion (5)	66.3	70.3	82.4	57.1	80.0	.

Viborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	68	22	8	12	6	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	68	22	8	12	6	.
Meeting indicator criteria (4)	46	20	5	11	4	.
Estimated proportion (5)	67.6	90.9	62.5	91.7	66.7	.

Aalborg	< 2010	2010	2011_1	2011_2	2011_3	2011_4
Data basis (1)	114	54	10	12	6	.
Data completeness (2)	100.0	100.0	100.0	100.0	100.0	.
Actual data basis (3)	114	54	10	12	6	.
Meeting indicator criteria (4)	73	41	7	8	4	.
Estimated proportion (5)	64.0	75.9	70.0	66.7	66.7	.

Notes to tables:

(1) Number of patients with their first reported dialysis intervention after December 31st, 2007 in Denmark (information about date and place must be available). To count as first, the dialysis intervention has to be the first and reported or marked as the first in the database. Furthermore, patients with renal transplantation (TX) before their first dialysis are excluded.

(2) Criteria for data completeness ((2) = (3) / (1)). Patients are excluded from the analyses if:
 a) there is no information about *første journalnotat*, or
 b) the date of *første journalnotat* is after the date of first registered dialysis intervention.

(3) Number of patients with their first dialysis intervention during the time period and complete data.

(4) Number of patients who had an early referral for the first dialysis treatment.

(5) Proportion of patients who had an early referral for the first dialysis treatment = (4) / (3).

Additional listings

List to Table 1.5: Changes since last quarterly report - patients included before, but excluded now

In principal, an exclusion variable EX is set to 1 for a patient if the patient is excluded, and to 0 if the patient is not excluded. Reasons for exclusion are the following:

EX0 = 1: Exclusion due to "interventions with missing dates"

EX1 = 1: Exclusion due to "preliminary CPR number"

EX2 = 1: Exclusion due to "invalid CPR number"

EX3 = 1: Exclusion due to "not a single treatment code"

EX4 = 1: Exclusion due to "illogical course of HD"

EX5 = 1: Exclusion due to "illogical course of PD"

EX6 = 1: Exclusion due to "illogical course of TX"

EX8 = 1: Exclusion due to "illogical administrative course"

EX9 = 1: Exclusion due to "illogical recovery"

Nr	Patient_id	Date of first intervention	EX0	EX1	EX2	EX3	EX4	EX5	EX6	EX8	EX9
1	5830	18nov1992	0	0	0	0	0	0	0	1	0
2	8378	08jul1999	0	0	0	0	0	0	0	1	0
3	4765	06nov2003	0	0	0	0	0	0	0	1	0
4	9425	10mar2004	0	0	0	0	0	0	0	1	0
5	13005	12aug2008	0	0	0	0	0	0	0	1	0
6	13715	15apr2009	1	0	0	0	0	0	0	0	0
7	13554	10jul2009	0	0	0	0	0	0	0	1	0
8	13845	03dec2009	1	0	0	0	0	0	0	0	0
9	14273	28jan2010	0	0	0	0	0	0	0	1	0

Table 5.1: Number of patients where CPR-date of death and TOPICA-date of death (*brugerdefmorsdato* in *uraemiforloeb.dta*) disagree. Patients are categorized according to their date of first intervention. CPR data are from October 14, 2011.

Disagreement in days	<2010	2010	2011_1	2011_2	2011_3	2011_4	Total
0	9683	110	14	6	1	.	9814
1	79	2	.	.	.	.	81
2	19	1	.	.	.	.	20
>2	6	3	.	.	.	.	9
Missing TOPICA-date of death while CPR-date of death exists	155	22	4	3	.	.	184
Missing CPR-date of death while TOPICA-date of death exists	2	.	.	.	.	.	2
Both CPR-date of death and TOPICA-date of death missing	4000	526	103	123	65	.	4817

List to Table 5.1: Patients where CPR-date of death and TOPICA-date of death (*brugerdefmorsdato* in *uraemiforloeb.dta*) disagree for more than 2 days

Nr	Patient_id	Year of first intervention	Date of death - CPR	Date of death - TOPICA	Disagreement (days)
1	1680	1982	04mar2008	11 Jun 08	99
2	10911	1993	30nov2010	08 Dec 10	8
3	10240	1997	15aug2009	15 Aug 10	365
4	6150	2000	15may2011	11 May 11	4
5	10576	2005	18aug2010	18 Aug 08	730
6	12996	2008	09sep2011	16 Sep 11	7
7	14541	2010	23dec2010	06 Jan 11	14
8	14581	2010	16jan2011	27 Dec 10	20
9	14785	2010	05oct2010	08 Feb 09	604