

**NHS BLOOD & TRANSPLANT  
PANCREAS ADVISORY GROUP**

**NATIONAL PANCREAS OFFERING SCHEME**

**24 MONTH ACTIVITY SUMMARY -  
11 SEPTEMBER 2019 TO 10 SEPTEMBER 2021**

**INTRODUCTION**

1. The National Pancreas Offering Scheme was revised on 11 September 2019 to introduce a new top tier for patients. A review of the first year was presented at PAG in November 2020. The second 6-months of the scheme were severely affected by the COVID-19 pandemic and the latest year of the scheme was also disrupted.
2. Between March and August 2020, pancreas transplantation was suspended for a period of time and as centres began reopening with selected patients, it was agreed to have a deviation from the offering scheme. Tier A patients were still given patient specific offers but organs were then fast tracked to centres for use in any of their listed patients. The deviation came to an end on 10 August 2020, when five centres were re-opened.
3. This paper summarises activity in the first 2 years of the scheme and is not a review of how the scheme is performing, due to the issues mentioned above.

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## NATIONAL PANCREAS OFFERING SCHEME (2019)

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# PANCREAS TRANSPLANTATION

**Table 1.1 Overview of transplant activity, 11 September 2019 - 10 September 2021**

Transplant type		Donor type		Total
		DBD	DCD	
Vascularised pancreas	SPK	162	58	<b>220</b>
	PAK	9	2	<b>11</b>
	PTA	2	0	<b>2</b>
	<b>Total</b>	<b>173</b>	<b>60</b>	<b>233</b>
Pancreatic islet	Routine	17	4	<b>21</b>
	Priority	10	1	<b>11</b>
	SIK	6	3	<b>9</b>
	<b>Islet total</b>	<b>33</b>	<b>8</b>	<b>41</b>
<b>TOTAL</b>		<b>206</b>	<b>68</b>	<b>274</b>

**Table 1.2 Centre-specific transplant activity, 11 September 2018 - 10 September 2021**

Transplant centre	Previous year		NPOS 2019 (2 Year)					Donor type	
	N	(%)	N	(%)	Transplant type			DBD	DCD
					SPK	PAK	PTA		
<b>Vascularised pancreas</b>									
Cambridge	20	(12)	42	(18)	41	1	0	27	15
Cardiff	8	(5)	15	(6)	15	0	0	10	5
Edinburgh	16	(10)	29	(12)	29	0	0	22	7
Guy's	27	(16)	30	(13)	30	0	0	22	8
Manchester	34	(21)	31	(13)	26	5	0	22	9
Newcastle	7	(4)	8	(3)	7	1	0	7	1
Oxford	46	(28)	69	(30)	63	4	2	55	14
WLRTC	7	(4)	9	(4)	9	0	0	8	1
<b>Total</b>	<b>165</b>	<b>(100)</b>	<b>233</b>	<b>(100)</b>	<b>220</b>	<b>11</b>	<b>2</b>	<b>173</b>	<b>60</b>
<b>Pancreatic islet</b>									
	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>	<b>Routine</b>	<b>Priority</b>	<b>SIK</b>	<b>DBD</b>	<b>DCD</b>
Bristol	0	-	0	-	0	0	0	0	0
Edinburgh	11	(38)	20	(49)	10	8	2	16	4
King's College	2	(7)	3	(7)	2	1	0	2	1
Manchester	9	(31)	5	(12)	0	0	5	3	2
Newcastle	4	(14)	7	(17)	6	1	0	7	0
Oxford	3	(10)	6	(15)	3	1	2	5	1
Royal Free	0	-	0	-	0	0	0	0	0
<b>Total</b>	<b>29</b>	<b>(100)</b>	<b>41</b>	<b>(100)</b>	<b>21</b>	<b>11</b>	<b>9</b>	<b>33</b>	<b>8</b>

**Table 1.3 Transplant demographics, 11 September 2018 - 10 September 2021**

Factor		Previous Year		NPAS 2019 results (year1)		NPAS 2019 results (year2)	
		N	(%)	N	(%)	N	(%)
Number of transplants		194	(100)	145	(100)	129	(100)
Waiting time (months)	0 to <3	34	(18)	27	(19)	26	(20)
	3 to <6	22	(11)	16	(11)	12	(9)
	6 to <12	39	(20)	29	(20)	14	(11)
	12 to <24	73	(38)	59	(41)	46	(36)
	24 to <36	17	(9)	10	(7)	24	(19)
	36 or more	9	(5)	4	(3)	7	(5)
Sensitisation (cRF%)	0 to <30	139	(72)	99	(68)	99	(77)
	30 to <75	34	(18)	30	(21)	18	(14)
	75 to <100	20	(10)	15	(10)	10	(8)
	100	1	(1)	1	(1)	2	(2)
Matchability Score	1-3	40	(21)	69	(48)	66	(51)
	4-7	111	(57)	67	(46)	54	(42)
	8-10	43	(22)	9	(6)	9	(7)
Total HLA mismatch (A,B,DR)	0 to 4	162	(84)	114	(79)	98	(76)
	5 or 6	32	(16)	31	(21)	31	(24)
Centre location	Closest three	128	(66)	79	(54)	66	(51)
	Other	66	(34)	66	(46)	63	(49)
On dialysis	No	79	(41)	81	(56)	63	(49)
	Yes	115	(59)	64	(44)	66	(51)
Transplant type	SPK	150	(77)	119	(82)	101	(78)
	PAK, PTA	15	(8)	8	(6)	5	(4)
	Routine islet	8	(4)	9	(6)	12	(9)
	Priority islet	12	(6)	7	(5)	4	(3)
	SIK	9	(5)	2	(1)	7	(5)
Recipient sex	Male	116	(60)	67	(46)	67	(52)
	Female	78	(40)	78	(54)	62	(48)
Recipient blood group	O	87	(45)	63	(43)	47	(36)
	A	81	(42)	55	(38)	53	(41)
	B	18	(9)	22	(15)	20	(16)
	AB	8	(4)	5	(3)	9	(7)
Recipient age (years)	Less than 30	13	(7)	8	(6)	6	(5)
	30 to <40	51	(26)	54	(37)	39	(30)
	40 to <50	68	(35)	47	(32)	42	(33)
	50 to <60	56	(29)	29	(20)	33	(26)
	60 or older	6	(3)	7	(5)	9	(7)
Recipient ethnicity	White	166	(86)	123	(85)	110	(85)
	BAME	27	(14)	22	(15)	19	(15)
	Not known	1	(1)	0		0	
Offer Tier	New KOS Tier A	3	(2)	2	(1)	3	(2)
	New POS Tier A	10	(5)	4	(3)	8	(6)
	New POS Tier B	180	(93)	136	(94)	116	(90)
	Other	1	(1)	3	(2)	2	(2)

**Table 1.4 Blood group matching, 11 September 2019 - 10 September 2021**

Donor blood group	Recipient blood group								TOTAL	
	O		A		B		AB		N	(%)
O	110	(87)	4	(3)	10	(8)	2	(2)	<b>126</b>	<b>(46)</b>
A	0		104	(99)	0		1	(1)	<b>105</b>	<b>(38)</b>
B	0		0		32	(100)	0		<b>32</b>	<b>(12)</b>
AB	0		0		0		10	(100)	<b>10</b>	<b>(4)</b>
Unknown	0		0		0		1	(100)	<b>1</b>	<b>(0)</b>
<b>TOTAL</b>	<b>110</b>	<b>(40)</b>	<b>108</b>	<b>(39)</b>	<b>42</b>	<b>(15)</b>	<b>14</b>	<b>(5)</b>	<b>274</b>	<b>(100)</b>

Of the 18 non-identical transplants, 10 were patients in Tier A of KOS or POS

**Table 1.5 Donor BMI by transplant type, 11 September 2019 - 10 September 2021**

Donor BMI (kg/m <sup>2</sup> )	Transplant type				TOTAL N
	Vascularised pancreas		Pancreatic islet		
	N	(%)	N	(%)	
Less than 23	107	(46)	2	(5)	109
23 to <26	79	(34)	9	(22)	88
26 to <29	37	(16)	11	(27)	48
29 to <31	10	(4)	7	(17)	17
31 or over	0	(0)	12	(29)	12
<b>TOTAL</b>	<b>233</b>	<b>(100)</b>	<b>41</b>	<b>(100)</b>	<b>274</b>

Please note: Those islet transplants where donor BMI <25kg/m<sup>2</sup>, the donor age was >=25 years

**Table 1.6 Donor age by transplant type, 11 September 2019 - 10 September 2021**

Donor age (years)	Transplant type				TOTAL N
	Vascularised pancreas		Pancreatic islet		
	N	(%)	N	(%)	
Less than 25	90	(39)	5	(12)	95
25 to <30	23	(10)	2	(5)	25
30 to <40	35	(15)	8	(20)	43
40 to <50	59	(25)	10	(24)	69
50 to <60	25	(11)	16	(39)	41
60 or older	1	(0)	0	(0)	1
<b>TOTAL</b>	<b>233</b>	<b>(100)</b>	<b>41</b>	<b>(100)</b>	<b>274</b>

Please note: Those islet transplants where donor age was <25 years, the donor BMI >=25kg/m<sup>2</sup>

# **PANCREAS TRANSPLANT LIST & WAITING TIMES**

**Table 2.1 Overview of the national and centre specific transplant list, as at 1 September 2019 and 1 September 2021**

Transplant centre	1 Sep 2019		1 Sep 2021		Transplant type		
	N	(%)	N	(%)	SPK	PAK	PTA
<b>Vascularised pancreas</b>							
Cambridge	12	(6)	9	(4)	9	0	0
Cardiff	13	(6)	2	(1)	2	0	0
Edinburgh	33	(15)	32	(13)	32	0	0
Guy's	25	(12)	31	(12)	31	0	0
Manchester	29	(13)	60	(24)	59	0	1
Newcastle	6	(3)	18	(7)	16	0	2
Oxford	86	(40)	85	(34)	79	0	6
WLRTC	12	(6)	12	(5)	12	0	0
<b>Total</b>	<b>216</b>	<b>(100)</b>	<b>249</b>	<b>(100)</b>	<b>240</b>	<b>0</b>	<b>9</b>
<b>Pancreatic islet</b>	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>	<b>Routine</b>	<b>Priority</b>	<b>SIK</b>
Bristol	0	-	0	-	0	0	0
Edinburgh	9	(21)	4	(14)	2	1	1
King's College	3	(7)	0	(0)	0	0	0
Manchester	19	(44)	13	(45)	1	2	10
Newcastle	6	(14)	8	(28)	5	3	0
Oxford	4	(9)	4	(14)	1	2	1
Royal Free	2	(5)	0	(0)	0	0	0
<b>Total</b>	<b>43</b>	<b>(100)</b>	<b>29</b>	<b>(100)</b>	<b>9</b>	<b>8</b>	<b>12</b>



**Table 2.2 Transplant list demographics, 1 September 2019 and 1 September 2021**

Factor		1 Sep 2019		Current (1 Sep 2021)		New Registrations	
		N	(%)	N	(%)	N	(%)
Time listed (months)	0 to <3	66	(25)	66	(24)	183	(39)
	3 to <6	37	(14)	47	(17)	116	(25)
	6 to <12	74	(29)	68	(24)	129	(27)
	12 to <24	58	(22)	57	(21)	45	(10)
	24 to <36	12	(5)	25	(9)	0	(0)
	36 or more	12	(5)	15	(5)	0	(0)
Sensitisation (cRF%)	0 to <30	160	(62)	186	(67)	396	(84)
	30 to <75	43	(17)	47	(17)	50	(11)
	75 to <100	39	(15)	28	(10)	21	(4)
	100	17	(7)	17	(6)	6	(1)
Matchability Score	1-3	39	(15)	139	(50)	240	(51)
	4-7	133	(51)	101	(36)	185	(39)
	8-10	87	(34)	38	(14)	40	(8)
	Not known	0	(0)	0	(0)	8	(2)
On dialysis	Yes	95	(37)	132	(47)	228	(48)
	No	164	(63)	146	(53)	245	(52)
Transplant type	SPK	201	(78)	240	(86)	390	(82)
	PAK, PTA	15	(6)	9	(3)	17	(4)
	Routine islet	23	(9)	9	(3)	23	(5)
	Priority islet	3	(1)	8	(3)	22	(5)
	SIK	17	(7)	12	(4)	21	(4)
Recipient sex	Female	132	(51)	142	(51)	224	(47)
	Male	127	(49)	136	(49)	249	(53)
Recipient blood group	O	130	(50)	149	(54)	218	(46)
	A	75	(29)	92	(33)	186	(39)
	B	45	(17)	34	(12)	53	(11)
	AB	9	(3)	3	(1)	16	(3)
Recipient age (years)	Less than 30	18	(7)	22	(8)	40	(8)
	30 to <40	71	(27)	93	(33)	169	(36)
	40 to <50	77	(30)	83	(30)	154	(33)
	50 to <60	76	(29)	69	(25)	91	(19)
	60 or older	17	(7)	11	(4)	19	(4)
Recipient ethnicity	White	221	(85)	249	(90)	417	(88)
	BAME	38	(15)	28	(10)	54	(11)
	Not known	0	(0)	1	(0)	2	(0)
Offering Tier	New KOS Tier A	11	(4)	6	(2)	6	(1)
	New POS Tier A	11	(4)	14	(5)	1	(0)
	Other	237	(92)	258	(93)	466	(99)

<sup>1</sup> Matchability score not calculated as patients were active for less than a day.

# **OFFERING, RETRIEVAL AND ORGAN USE**

**Table 3.1 Overall use of pancreases from solid organ donors, 11 September 2018 to 10 September 2021**

	Solid organ donors	SPC <sup>1</sup> donors	Offered		Accepted		Pancreas Retrieved		Transplanted		Conversion %
			N	(%)	N	(%)	N	(%)	N	(%)	
<b>Donations after brain death</b>											
NPOS Yr 1	888	721	547	(76)	277	(51)	226	(82)	106	(47)	19
NPOS Yr 2	766	625	478	(76)	267	(56)	201	(75)	100	(50)	21
Previous year	909	696	598	(86)	389	(65)	332	(85)	144	(43)	24
<b>Donations after cardiac death</b>											
NPOS Yr 1	509	279	210	(75)	111	(53)	81	(73)	39	(48)	19
NPOS Yr 2	517	270	218	(81)	102	(47)	72	(71)	29	(40)	13
Previous year	664	297	249	(84)	146	(59)	109	(75)	50	(46)	20

<sup>1</sup> Standard pancreas criteria (SPC) donors have been defined as those aged 65 years or less for DBD and 55 years or less for DCD

**Table 3.2 Use of pancreases from solid organ donors, 11 September 2018 to 10 September 2021**

	Solid organ donors	SPC <sup>1</sup> donors	Offered		Accepted		Whole Pancreas Retrieved		Transplanted		
			N	(%)	N	(%)	N	(%)	N	(%)	
<b>Donations after brain death</b>											
NPOS Yr 1	888	721	486	(67)	223	(46)	177	(79)	93	(53)	
NPOS Yr 2	766	625	423	(68)	195	(46)	147	(75)	80	(54)	
Previous year	909	696	518	(74)	280	(54)	241	(86)	118	(49)	
<b>Donations after cardiac death</b>											
NPOS Yr 1	509	279	193	(69)	92	(48)	67	(73)	34	(51)	
NPOS Yr 2	517	270	211	(78)	84	(40)	63	(75)	26	(41)	
Previous year	664	297	226	(76)	119	(53)	95	(80)	47	(49)	
	Solid organ donors	SPIC <sup>2</sup> donors	Offered		Accepted		Pancreas Islets Retrieved		Transplanted		
			N	(%)	N	(%)	N	(%)	N	(%)	
<b>Donations after brain death</b>											
NPOS Yr 1	888	642	205	(32)	72	(35)	49	(68)	13	(27)	
NPOS Yr 2	766	536	258	(48)	87	(34)	54	(62)	20	(37)	
Previous year	909	613	274	(45)	129	(47)	91	(71)	26	(29)	
<b>Donations after cardiac death</b>											
NPOS Yr 1	509	213	72	(34)	21	(29)	14	(67)	5	(36)	
NPOS Yr 2	517	196	90	(46)	19	(21)	9	(47)	3	(33)	
Previous year	664	220	98	(45)	28	(29)	14	(50)	3	(21)	

<sup>1</sup> Standard pancreas criteria (SPC) donors have been defined as those aged 65 years or less for DBD and 55 years or less for DCD

<sup>2</sup> Standard pancreas islet criteria (SPIC) donors have been defined as those aged 60 years or less for DBD and 50 years or less for DCD

Figure 3.3 Review of islet isolations performed  
11 September 2019 – 10 September 2021

