### **Clinical Report**

## Matching System within Clinical Training Facilities Group of Clinical Dental Training in Tokyo Dental College Chiba Hospital

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#### Abstract

Since clinical dental training became mandatory in April 2006, Tokyo Dental College Chiba Hospital has been offering the following two types of training system: 1. a single system, and 2. a clinical training facilities group system. The clinical training facilities group system consists of program B, in which residents are trained in a cooperation-type clinical training facility for 3-4 months, and program C, in which residents are trained in two cooperation-type clinical training facilities for 7-8 months. A matching system within the clinical training facilities group is applied to select and decide on the cooperationtype clinical training facility for residents. In this system, the ranking of resident candidates that a cooperation-type clinical training facility would like to accept, and the ranking of training facilities that candidates choose are matched. The present study investigated the matching system within the clinical training facilities group in 2006, 2007, and 2008. The rate of matching to their third choice was more than 90% in program B and about 80% in program C in each year, suggesting a high matching rate. The percentage of cooperationtype clinical training facilities accepting dental residents dropped due to a decrease in the number of such residents. The distribution of accepted cooperation-type clinical training facilities is concentrated in Chiba Prefecture where our hospital, the management-type clinical training facility, is located, and the neighboring prefectures.

Key words: Clinical dental training—Training facilities group system— Cooperation-type clinical training facility—Matching system— Tokyo Dental College Chiba Hospital

Introductiondatory in April 2006, Tokyo Dental College<br/>Chiba Hospital has been offering the follow-<br/>ing two types of training system: 1. a single

Program	2006		2007		2008	
	В	С	В	С	В	С
Participants	29	49	27	46	23	46
Max.	10	10	10	10	7	10
Min.	3	2	2	2	1	2
Mean	7.97	8.31	5.19	5.33	3.00	5.02

Table 1 Participation of dental residents in matching system within clinical training facilities group

Maximum number of cooperation-type clinical training facilities reported by dental residents: Max. Minimum number of cooperation-type clinical training facilities reported by dental residents: Min. Mean number of cooperation-type clinical training facilities reported by dental residents: Mean

system (Program A: 32 places), and 2. a clinical training facilities group system. The clinical training facilities group system consists of program B (30 places), in which residents are trained in a cooperation-type clinical training facility for 3-4 months, and program C (66 places), in which residents are trained in two cooperation-type clinical training facilities for 7-8 months. A matching system within the clinical training facilities group is applied to select and decide on the cooperation-type clinical training facility for residents. In this system, the ranking of resident candidates that a cooperation-type clinical training facility would like to accept, and the ranking of training facilities that candidates choose are matched.

We reported the state of clinical training at cooperation-type clinical training facilities and problems experienced<sup>2,3</sup>.

In this study, we investigated the matching system within the clinical training facilities group. The results for 2006–2008 are discussed.

#### Methods

The procedure for the matching system within the clinical training facilities group was as follows: A facility information session was held for dental resident applicants by supervisory dentists from cooperation-type clinical training facilities in March and facility tours organized. The ranking documents were submitted from cooperation-type clinical training facilities and resident candidates for their 
 Table 2
 Number of cooperation-type clinical training facilities

	2006	2007	2008
Registered facilities	87	101	111
Facilities of choice	74	67	62
Accepting facilities	50	46	48

choice of residents and facilities, respectively. The rankings were matched to determine the facility for residents. For unmatched residents whose facilities could not be determined by this procedure, we negotiated with cooperationtype clinical training facilities individually.

This study investigated the matching results and acceptance of dental residents by cooperation-type clinical training facilities based on the results of the matching system within the clinical training facilities group. We also performed a survey involving dental residents in 2008 to investigate the reason for choosing cooperation-type clinical training facilities.

### **Results and Discussion**

# 1. Matching system within clinical training facilities group

All dental residents participated in the matching system within the clinical training facilities group. The number of participants was 78 (29 in program B and 49 in program C) in 2006, 73 (27 in program B and 46 in program C) in 2007, and 69 (23 in program B and 46 in program C) in 2008, suggesting a slight decrease over time (Table 1).

	2006		2007		2008	
-	Residents	Rate	Residents	Rate	Residents	Rate
1st choice	23	79.3%	18	66.7%	18	78.3%
2nd choice	3	89.7%	7	92.6%	3	91.3%
3rd choice	1	93.1%	0	92.6%	1	95.7%
Other	2	100.0%	1	96.3%	1	100.0%
Unmatched residents	0		1		0	

Table 3 Matching results of program B

Total matching rate: Rate

Residents matched with their first choice: 1st choice

Residents matched with their second choice: 2nd choice

Residents matched with their third choice: 3rd choice

Residents matched with their 4th or higher choice: Other

	2006		2007		2008	
-	Residents	Rate	Residents	Rate	Residents	Rate
1st and 2nd choices	27	55.1%	29	63.0%	27	58.7%
1st and 3rd choices	7	69.4%	3	69.6%	8	76.1%
2nd and 3rd choices	9	87.8%	4	78.3%	3	82.6%
Others	6	100.0%	8	95.7%	5	93.5%
Unmatched residents	0		2		3	

Table	4	Matching	results	of	program	С
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Total matching rate: Rate

Residents matched with their first and second choice: 1st and 2nd choice

Residents matched with their first and third choice: 1st and 3rd choice

Residents matched with their second and third choice: 2nd and 3rd choice

The average number of ranked facilities in the matching system within the clinical training facilities group decreased both in programs B and C over time (Table 1).

The registered number of cooperationtype clinical training facilities was 87 in 2006, 101 in 2007, and 111 in 2008, showing an increase (Table 2).

The number of residents choosing training facilities was 74 in 2006, 67 in 2007, and 62 in 2008. This showed a decrease, despite an increase in the number of registered facilities (Table 2), suggesting that dental residents narrow down the facilities of their choice.

The number of cooperation-type clinical training facilities accepting dental residents was 50 in 2006, 46 in 2007, and 48 in 2008, showing a slight decrease over time (Table 2). This is considered to be due to the decrease in the number of dental residents.

The results of the matching system within the clinical training facilities group are shown in Tables 3 and 4. The rate of matching to the residents' first choice was 79.3% (23 residents) in 2006, 66.7% (18 residents) in 2007 and 78.3% (18 residents) in 2008 in program B, and 55.1% (27 residents) in 2006, 63.0% (29 residents) in 2007 and 58.7% (27 residents) in 2008 in program C.

The total rate of matching to the residents' third choice was 93.1% (27 residents) in 2006, 92.6% (25 residents) in 2007, and 95.7% (22 residents) in 2008 in program B, and 87.8% (43 residents) in 2006, 78.3% (36 residents) in 2007, and 82.6% (38 residents) in 2008 in program C, showing a high matching rate. This suggests a high rate of matching the requests of dental residents and cooperation-type clinical training facilities.

	2006		20	07	2008	
	Registered	Accepting	Registered	Accepting	Registered	Accepting
Hokkaido	2	1	2	1	2	1
Aomori	1	0	1	0	1	1
Fukushima	0	0	0	0	1	1
Gunma	1	1	1	1	1	1
Tochigi	1	0	1	0	1	0
Ibaragi	3	2	3	0	3	0
Saitama	5	3	6	3	7	4
Chiba	34	24	40	24	41	23
Tokyo	15	8	20	8	21	9
Kanagawa	6	3	5	3	9	2
Yamanashi	1	1	1	0	1	0
Shizuoka	4	2	4	1	4	1
Nagano	0	0	0	0	2	0
Toyama	0	0	1	0	1	1
Aichi	2	1	2	2	2	1
Mie	0	0	1	0	1	0
Kyoto	2	0	2	0	1	0
Osaka	2	1	3	1	3	1
Hyogo	1	1	1	1	1	1
Okayama	2	1	2	0	2	0
Tottori	1	0	1	0	1	0
Kagawa	2	0	2	0	2	0
Fukuoka	1	1	1	0	1	1
Kumamoto	0	0	0	0	1	0
Kagoshima	1	0	1	1	1	0
Total	87	50	101	46	111	48

Table 5 Distribution of cooperation-type clinical training facilities

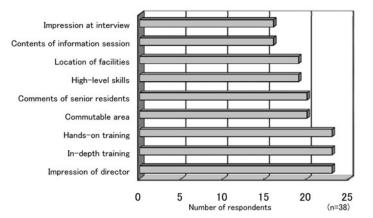


Fig. 1 Reason for choosing cooperation-type clinical training facilities

# 2. Distribution of cooperation-type clinical training facilities

training facilities accepting dental residents was 50 in 2006, 46 in 2007, and 48 in 2008. The distribution of accepted facilities showed

The number of cooperation-type clinical

that 80% of the facilities were concentrated in Chiba Prefecture where the managementtype clinical training facility is located and its neighboring prefectures (Tokyo, Saitama, Kanagawa), despite the wide distribution of facilities all over Japan (Table 5). This result showed the same trend as in the report by the Ministry of Health, Labour and Welfare<sup>1)</sup>.

We performed a survey among dental residents who participated in the matching system within the clinical training facilities group in 2008 to choose cooperation-type clinical training facilities. Multiple answers were allowed in the survey. The number of respondents was 38.

Figure 1 shows the main reason for choosing the facility and the number of respondents. "The impression of supervisory dentists and the director", "in-depth training", and "hands-on oriented" ranked top, followed by "commutable area", "location of the facility", and "comments of senior residents".

These results suggests that residents consider training program contents and quality the most important factors in choosing cooperationtype clinical training facilities, followed by location and reputation of the facilities.

We believe that residents chose Chiba Prefecture where the management-type clinical training facility is located and its neighboring prefectures as popular sites of cooperationtype clinical training facilities due to training content, quality, and commuting conditions.

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