

Hospital activity changes and total purchasing in 1996/7

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1 Summary

The 'first-wave' TPP sites were distinguished by five types according to the TP-NET typology. This report summarises the hospital activity analysis for two of these types: Commissioner TPPs and Co-purchaser TPPs. Hospital activity data were available for acute hospital care in 1996/7 for 20 of the 24 Commissioner TPP sites, and 8 of the 10 Co-purchaser TPP sites.

All 20 Commissioner TPP sites had objectives to either reduce acute emergency admissions or reduce acute hospital length of stay. The activity analysis indicates that 15 of the 20 Commissioner TPP sites were 'successful' in at least one of these objectives. 'Success' for a TPP was defined as better performance than the local comparator group¹. Six of the 8 Co-purchaser TPP sites had objectives to either reduce acute emergency admissions or reduce acute hospital length of stay and four were 'successful' in achieving at least one of these. Table 1 summarises these activity analysis findings.

Table 1 Summary activity analysis results: the percentage of 'successful' Commissioner and Co-purchaser TPP sites (and number with the objective) with objectives relating to emergency admissions or length of stay in 1996/7

Objective	% of 'successful' TPP sites (and number) 'Main' objective	% of 'successful' TPP sites (and number) 'Secondary' objective
emergency admissions		
Commissioners	82% (9/11)	33% (2/6)
Co-purchasers	100% (2/2)	0% (0/2)
length of stay		
Commissioners	36% (4/11)	66% (4/6)
Co-purchasers	75% (3/4)	0% (0/0)

The 'successful' Commissioner TPP sites used a range of methods to prevent acute emergency admissions (table 2), the most common being the use of community-based nursing teams. With regard to reducing acute emergency length of stay, project nurses were usually used to facilitate the early discharge of patients to community hospital GP beds.

Table 2 Summary of the main methods used by the 20 'successful' Commissioner TPP sites to achieve objectives relating to emergency admissions or length of stay in 1996/7

main methods used by the TPPs ²	to reduce acute emergency admissions		to reduce acute emergency length of stay	
	main objective	secondary objective	main objective	secondary objective
community nursing teams	4	2	1	2
community hospital GP care/beds	3		8	2
TPP project nurses	2		7	1
social worker/social services link	2			1
treatment protocols	2			1
nursing homes	1	1	1	

While four Co-purchaser TPP sites were 'successful' in achieving at least one of their objectives to either reduce acute emergency admissions or reduce acute hospital length of stay, it is noteworthy that all four of these TPP sites had originally wanted to be Commissioners in 1996/7. In addition, the innovations introduced by the Co-purchasers were funded by the host Health Authorities, and did not have financial repercussions for the affected hospital providers.

Commissioner and Co-purchaser TPPs often attempted to substitute community hospitals or nursing homes as venues for care in place of acute hospitals. The Hospital Episode Statistics data does not include nursing home activity, and in two cases NHS community hospital activity were missing from the datasets. Hence, the analysis enabled shifts to NHS community hospitals be picked up in all but two cases, while the change in nursing home activity could not be detected. The Commissioner TPP code Cm14 illustrates the successful early discharge of emergency geriatric cases

¹ In this analysis 'success' for a TPP was defined as better performance than the local comparator group as indicated by the percentage change in relevant activity at the TPP's main acute provider. Hence, a 'successful' TPP experienced a smaller increase or larger decrease in admissions or length of stay compared to its local comparator group (the practices sharing the TPP's main provider).

² Note: some TPP sites used more than one main method to achieve each objective.

from an acute hospital to a community hospital rehabilitation facility, which resulted in an increase in overall OBDs. The cost implications of such shifts depend on the unit costs of each facility and the financial implications depend on the contracts in place.

The fifteen 'successful' Commissioner TPPs usually held sophisticated block or cost and volume contracts with prices based on FCEs at average specialty cost. Cost savings were reported to have been achieved or to have met predicted levels for less than half (6/13) these main acute contracts. Robinson *et al.*, 1998, reported the difficulty experienced by TPPs that wished to move away from contracting on FCEs. The 'successful' Commissioner TPPs show that progress made in changing service provision need not be accompanied by a contract currency which reflects the activity changes and may not lead to savings.

Conclusions:

- TPP 'Commissioning' can be an effective method for GPs to bring about change to their use of secondary care services.
- The Commissioner TPP sites demonstrated great initiative by starting to change the pattern of hospital use in order to meet local objectives.
- However, most Commissioner TPP sites were not able to negotiate length of stay sensitive pricing, which is vital for the efficient use of available funds in the long term.
- Co-purchaser TPP sites also achieved some successes. However the fact that many of them intended initially to operate as Commissioners limits the conclusions that can be drawn about co-purchasing as a model.
- Primary Care Groups at Level II will be similar to Commissioner TPPs with regard to their budgetary responsibility for the purchase/commissioning of healthcare.
- The types of, and mechanisms for, change in acute hospital care that Level II PCGs may make are likely to be similar to those of the Commissioner TPPs (substitution of community hospital and nursing homes for acute hospital admissions and bed days).

2 Introduction

This Working Paper summarises the findings from the analysis of routine data on hospital activity which forms part of the national evaluation of Total Purchasing Pilots. This analysis covered the preparatory year (1995/6) and the first 'live' year (1996/7). The analysis provides evidence about the extent of changes made in hospital activity by TPPs with relevant objectives. In addition, it provides some evidence on the extent to which such changes achieved financial objectives and the impact of different contracting methods.

TPPs and the management of secondary care

Total Purchasing first arose as four local 'pioneer' initiatives, and the first of these to go 'live' was Bromsgrove TPP in April 1994. In October 1994 the NHS Executive and the Scottish Office Department of Health announced the 'first wave' of national pilots. These began a preparatory year in April 1995.

Total Purchasing was introduced as an extension of GP fundholding. It was intended that TPPs would manage most, if not all, hospital and community health services for their patients via delegated budgets and independent, activity sensitive contracts. In particular, the presence of a budget constraint was seen as a means of giving GPs an incentive to manage their expenditure on potentially expensive hospital care more appropriately by, for example, reducing emergency admissions or reducing hospital length of stay.

However, the first wave TPPs did not all develop in line with the extended fundholding model, and TP-NET (Mays *et al.* 1998 a, p17) produced a typology for the TPPs in 1996/7. This typology has been applied to the TPP sites as follows³:

³ Fifty three TPPs originally formed the first wave. Four of these TPPs dropped out of the project during 1996/7. In addition, two TPPs are regarded as each comprising four separate 'sites'. One TPP split for all practical purposes into four separate sites following health authority boundary changes, and the other operated at practice level with different providers. Another TPP is regarded as a single site, even though each of its seven practices operated separately, because data on objectives was collected for one of the seven practices only. Hence, this report records 49 TPPs and 55 TPP sites in 1996/7.

Table 3 TPP Typology in 1996/7

	Number (%) of TPPs	Number (%) of TPP sites
Commissioners	23 (44.2)	24 (43.6)
Co-purchasers	8 (15.4)	10 (18.2)
Primary care developers	8 (15.4)	8 (14.5)
Developmental pilots	11 (21.2)	11 (20.0)
Undeveloped pilots	2 (3.8)	2 (3.6)
Total	52 (100.0)	55 (100.0)

Commissioners, were defined as 'projects directly purchasing in TP-related services areas with their own budgets and independent contracts to achieve changes in secondary care'.⁴ Co-purchasers were defined as 'projects not holding a budget and/or undertaking no direct purchasing, but attempting to change HA purchasing activities',⁵ by entering into 'joint' contracting arrangements with the host Health Authority. Commissioners made up 44% of the TPP sites, and Co-purchasers were less common and accounted for 18% of the TPP sites. This left 38% of TPP sites that pursued objectives relating to primary care or their own development in 1996/7.

When considering the achievement of objectives relating to the management of secondary care it is appropriate to take into account whether the TPPs secured the 'status' of a Commissioner or Co-purchaser, which indicates that they had mechanisms in place for influencing providers and had an interest in managing secondary care. The TPPs which were Primary Care Developers or Developmental TPPs in 1996/7, for whatever reason, offer little insight into the potential of a primary care organisation to influence hospital services, even if they originally had objectives relating to secondary care.

Objectives relating to hospital activity

An increase in emergency admissions to hospital has been evident for several years (NHS Confederation, 1997) and the consequent pressure on resources has focused attention on the need to better manage the use of hospital services. While many factors influence the level of hospital activity, Total Purchasing gave GPs the opportunity to change service provision by taking steps to prevent emergency admissions to acute hospitals by developing services to provide care in a more appropriate setting. As part of the goal to ensure that acute hospital beds are only occupied by patients who need to be in an acute hospital setting, TPP GPs could also take action to facilitate the timely discharge of their patients from acute beds.

Table 4 Commissioner and Co-purchaser TPP sites with objectives relating to emergency admissions or length of stay in 1996/7⁶

Objective	Number of TPP sites with this as a 'main' objective	Number of TPP sites with this as a 'secondary' objective	Number of TPP sites with no such objective
emergency admissions			
Commissioners	11	7	5
Co-purchasers	3	1	6
length of stay			
Commissioners	12	7	4
Co-purchasers	4	0	6

Table 4 summarises the objectives of the Commissioner and Co-purchaser TPP sites relating to emergency admissions and length of stay.⁷ The table distinguishes between 'main' and 'secondary' objectives in order to take into account the way the TPPs prioritised their objectives.³

⁴ Mays *et al.* 1998 a. p17.

⁵ *Ibid.*

⁶ One Commissioner TPP 'site' is excluded from this table and the analysis because each of the seven practices in the TPP operated independently and data on objectives was collected for one of the seven practices only.

⁷ The objectives data was recorded in the TP-NET second round interviews with TPP Project Managers and Lead GPs in 1997, and reviewed in 1998. This report distinguishes between an objective to reduce the number of emergency admissions to hospital and an objective relating to the management of A&E department attendances. The finding by Mays *et al.* 1998 a. that 32 TPPs had a main objective relating to emergency services in 1996/7, and that 44% of these TPPs were reported to have achieved their objective, did not make this distinction.

³ Note that this definition of a 'main' objective is not the same as that used by Mays *et al.* 1998 a. which classified the top four objectives as 'main' objectives.

Only three (13%) of the Commissioner TPP sites (Cm4, Cm7 and Cm10) had main objectives relating to both emergency admissions and length of stay, while all 23 Commissioners, for which data on objectives was collected, had a main objective to reduce emergency admissions or length of stay. One (10%) of the Co-purchaser TPP sites (Cp1) had main objectives relating to both emergency admissions and length of stay, while two (20%) Co-purchasers did not have a main objective to reduce emergency admissions or length of stay.

3 Methods

Data collection

As the national English Hospital Episode Statistics (HES) dataset for 1995/6 and 1996/7 did not include the registered GP practice code, it was necessary to collect the data from more direct sources. Permission to access HES data was sought from the Chief Executives of all host Health Authorities in England, and similarly permission to access SMR1 data was sought from the Chief Executives of the host Health Boards in Scotland. All Health Authorities and Health Boards gave their permission to access activity data for their residents. The Information and Statistics Division at the National Health Service in Scotland supplied the SMR1 data for the five host Health Boards, including practice code. HES data for 39 of the 40 Health Authorities was collected.⁹ The HES data from four HAs were not analysed because they were missing considerable numbers of Finished Consultant Episodes (FCEs), either because all data from individual trusts were missing or all data for particular periods were missing. The analysis that follows refers to 20 'Commissioner' and 8 'Co-purchaser' TPPs for which acute hospital data were available.

Analysis

The focus was on the medical and surgical specialties¹⁰, depending on the TPP sites' objectives. Maternity and mental health activity are the subject of separate analyses.

The change in activity of each TPP site between the preparatory year (1995/6) and the first 'live' year (1996/7) was compared to all other practices within the host Health Authority and to 'local' comparator practices. Local comparator practices were defined as those similarly reliant on the same acute hospital, thus enabling changes at provider level to be controlled for.¹¹

The percentage change in the number of FCEs by patient classification¹² and 'admission method' (emergency, elective or transfer¹³) were examined for each TPP site and associated comparator groups. In order to take account of the differences in the ratios of FCEs to admissions across different hospitals, the percentage change in the number of hospital admissions was also analysed.¹⁴ Percentage change in the average length of stay per FCE, and per admission, and the number of total occupied bed days were also analysed.

'Success' for a TPP was defined as better performance than the local comparator group as indicated by the percentage change in relevant activity at the TPP's main acute provider. Hence, a 'successful' TPP experienced a bigger change in the desired direction in admissions or length of stay compared to its local comparator group.

⁹ Most Health Authorities supplied their own data. However, one NHSE Regional Office supplied HES data for three Health Authorities, and one Health Authority supplied data for itself and another HA.

¹⁰ In this report 'medical' specialties are defined as all FCEs with HES specialty function codes between 300 and 460 plus 620. Similarly 'surgical' specialties are defined as all FCEs with HES Specialty Function codes between 100 and 190.

¹¹ Those practices with 20 or more FCEs and 50% or more of all FCEs (regardless of the HES Speciality Function code) at the TPP's main provider in 1995/6.

¹² HES defines 'ordinary admission' FCEs as those with HES Patient Classification code 1. 'Ordinary admission' FCEs exclude FCEs relating to day case admissions, mothers and babies using delivery facilities only (and regular day or night admissions, which are not required for central submission to HES.) HES defines 'day case' FCEs as those with HES Patient Classification code 2.

¹³ As defined in the NHS Information Management Group HES Codes, Classifications and Definitions version 3.1.

¹⁴ Some hospital 'spells' include more than FCE. The first FCE in a spell is recorded with HES Episode Number code 1, if a second FCE is present it has Episode Number code 2, etc.. Hence, the number of hospital admissions relating to ordinary admission FCEs is defined as the count of FCEs with HES Patient Classification code 1 and Episode Number code 1.

All FCEs with total OBDs of more than 365 days were excluded from this analysis.¹⁵

The preliminary analysis findings for each TPP site were sent to the TPP Project Manager and Health Authority Information Manager with an invitation to comment. This report takes into account the feedback received during this process.

Data quality

Information Department staff from a number of Health Authorities helped to improve the data quality by explaining idiosyncrasies of their data. However, the quality of HES data supplied varied from Health Authority to Health Authority. It is clear that there is considerable scope for some Health Authorities to improve the accuracy of the datasets for their residents. In particular, there appears to be an important role for some Health Authorities to help Trusts in their area improve the quality of the data they generate.

The FCEs were checked for non-standard use of codes for the specialty function, admission method, episode number and provider. Where possible local variations in coding practice were taken into account. In addition, duplicate FCEs were excluded when possible.¹⁶

The analysis grouped FCEs for the TPPs and comparator groups using the registered practice code, and consequently FCEs for which a practice code could not readily be determined were excluded. Where possible missing practice codes were updated using the NHS Organisational Code files if a registered GP code was present.

Statistical test

Differences in the number of FCEs and the number of admissions were analysed assuming a Poisson Distribution¹⁷ which assumes that events occur randomly and independently in time with a constant rate.

¹⁵ The following example illustrates how OBDs are counted for FCEs that do not start and finish within one HES year (April to March). An FCE starting in year 1 and finishing in year 2 is recorded in the FCE count for year 2. All the OBDs for the FCE (in year 1 and year 2) are recorded in the OBD count for year 2.

¹⁶ Note that FCEs associated with 'FCE inflation' would not be classified as duplicates. FCE inflation was reported by some HAs and TPPs to be a problem. In this report the results tables present percentage change figures for the number of admissions, rather than FCEs, and the average length of stay per admission, rather than the average LOS per FCE. This approach is intended, in part, to accommodate the reported differences in practice relating to the generation of FCEs

¹⁷ The methodology is illustrated by the following example: Let T refer to the TPP, and C refer to the comparator group. Let 1 refer to year 1, 2 to year 2. Let N be the number of admissions observed, and hence NT1, NC2 etc.. It is assumed that N must be greater than 10.

This leads to: $V(NT2/NT1) = (V(NT2) + RT^2 \times V(NT1))/NT1^2$ and $V(NC2/NC1) = (V(NC2) + RC^2 \times V(NC1))/NC1^2$

and the variance of the difference between them being the sum of the variances. The standard error is then the square root of the whole thing.

Example: suppose NT1 = 400, NT2 = 500, NC1 = 1600 and NC2 = 1700.

Then RT = 1.25, and RC = 1.0625 (representing a 25% and 6.25% increase in admissions for the TPP and others respectively).

Then $V(RT-RC) = (500 + 1.25^2 \times 400)/400^2 + (1700 + 1.0625^2 \times 1600)/1600^2$

$= (500 + 625)/160000 + (1700 + 1806.25)/2560000$

$= 0.00703125 + 0.0013696 = 0.0084008$

Standard Error = 0.091656

Difference = 0.25 - 0.0625 = 0.1875

Difference/Standard Error = 2.0457, which is assessed as significant when referred to a standard distribution table.

The P value in this example = $2 \times (1 - \text{NORMSDIST}(\sqrt{2.0457^2})) = 0.041$

4 Results

Commissioner TPP sites with objectives to reduce acute emergency admissions

Table 5 summarises the different approaches used by 11 Commissioner TPP sites with a main objective to reduce acute emergency admissions in 1996/7.

Table 5 Summary of the activity focus and methods used by the Commissioner TPP sites with a main objective to reduce acute emergency admissions in 1996/7.

TPP site code	Activity focus	Main methods	Comment
Cm1	Medical specialties	Use of HA initiated and HA-wide 'fast response service' which provided nurse led hospital-at-home care, plus linked social worker.	Fast response service scheme started in September/October 1996.
Cm2	Geriatrics	Increased use of GP beds at local community hospital, which is part of the main acute trust.	Initiative developed in collaboration with the main acute trust and started in November 1996.
Cm3	Medical specialties for the elderly	Introduced GP beds at the local community hospital for elderly rehabilitation, facilitated by a medical assessment unit at the main acute hospital.	The necessary arrangements were not completed in 1996/7.
Cm4	Geriatrics	Use of care protocols and increased use of community nurses.	Seven of the eight practices in the TPP joined an out-of-hours GP co-operative.
Cm5	Medical specialties for the elderly	Developed proactive care teams (PACTs) for specific service areas including the elderly.	PACTs were initially piloted at practice level. Main achievement reported was groundwork completed for 1997/8.
Cm6	All specialties	Introduced a hospital discharge team, increased use of pre-existing hospital-at-home care, and used nursing homes.	A discharge planning co-ordinator was appointed in August 1996, and the scheme went live in January 1997.
Cm7	All specialties	Introduced a GP care rota at the local community hospital, and created three GP assistant posts.	Initiated an 'intermediate care' block contract with the Health Board.
Cm8	Medical specialties	Appointed a social care co-ordinator in about September 1996, and nurse facilitator in March 1997.	Developed a plan for an A&E triage nurse which was implemented in March 1997.
Cm9	All specialties	Admissions protocol monitored and reviewed by appointed primary care liaison manager.	The site went 'live' in 1995/6. The manager's hours were increased to full-time during 1996/7.
Cm10	All specialties	Appointed a primary care liaison manager, increased use of local community hospitals and initiated nursing home use.	The site went 'live' in 1995/6. The establishment of a health and social services care team outside TP was reported to be the main achievement.
Cm11	All specialties	Plan to review acute emergency admissions. Piloted use of nursing homes in place of geriatric community hospital admissions.	Admissions were not formally reviewed following HA advice that emergency admission rates were lower than the HA average.

The most common initiatives, each cited four times, involved admissions to community hospitals, facilitated by the introduction of GP beds or increased GP care, or the use of community nursing teams to prevent admissions. The use of nursing homes and liaison manager/nurse facilitator roles were each cited three times. Treatment protocols and specific social services links were each cited twice. Table 5 also shows that for five of the 11 Commissioners the hospital activity intended to be affected by the initiatives was not limited to specific specialties, while four of these 11 sites concentrated on their elderly patients.

Table 6 Summary of the activity focus and methods used by the Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7.¹⁸

TPP site code	Activity focus	Main methods	Comment
Cm12	Medical specialties	Initiatives included the use of a 24 hour district nursing service and nursing home beds.	
Cm13	Medical specialties for the elderly	'Rapid response' project with community trust staff working in community supporting primary care nurses.	TPP and community trust collaboration.
Cm14	Geriatrics	Appointed a nurse facilitator and introduced rehabilitation beds at community hospital with GP care.	Direct admissions to the community hospital facility were initiated on a small scale towards the end of 1996/7.
Cm15	All specialties for older patients	Initiated rehabilitation team based at the local community hospital.	Operational for only about three months during the second half of 1996/7.
Cm16	Medical specialties	Planned to introduce GP beds at the local hospital.	No action was taken because, the TPP reported, it would have been necessary to close beds at the main acute hospital.
Cm17	Medical specialties	Introduced the use of nursing home beds staffed by TPP personnel, and employed a discharge liaison nurse.	The TPP described the arrangements as having worked well, although on a small scale.

¹⁸ TPP Cm22 is omitted from table 6 because the TPP is excluded from the analysis because the host Health Authority was unable to supply HES data for 1995/6. The TPP planned to use nursing home beds for direct admissions and to facilitate early discharge. However, although the local acute trust agreed to a length of stay sensitive contract, which was regarded as being necessary in order to release funding for the nursing home activity, the project did not proceed. Lack of support from GPs in the TPP and concern expressed by Social Services were cited as reasons for the inaction.

Table 6 shows that for six Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions, the most common initiatives cited also involved admissions to community hospitals, facilitated by the introduction of GP beds or increased GP care, or the use of community nursing teams to prevent admissions.

Table 7 shows for each of the Commissioner TPP sites with a main objective to reduce acute emergency admissions, the number of practices in the site and the site's total list size in April 1996. Table 7 also shows the specialties covering each TPP site's activity focus, the main acute contract type and analysis summary 'success' finding. As noted above, 'success' for a TPP was defined as better performance than the local comparator group as indicated by the percentage change in relevant activity at the TPP's main acute provider. Hence, a 'successful' TPP experienced a smaller increase or larger decrease in admissions or length of stay compared to its local comparator group.

Table 8 shows the analysis results for each of the Commissioner TPP sites with a main objective to reduce acute emergency admissions. All the summary results tables present the findings in the following format:

For the relevant activity the percentage change in the number of admissions (or the average length of stay) between the preparatory year and the first 'live' year is presented for each TPP both at its main acute provider and across all hospital providers. Three comparisons are shown. First, the change in the number of admissions for the TPP at the main provider is shown next to the change in the number of admissions experienced by the local comparator practices at the same provider. The difference in percentage change between the TPP and local comparator at the main provider was used to indicate 'success' for the TPP. Second, the change in the number of admissions for the TPP is compared to the change in the number of admissions experienced by the local comparator practices across all providers. Third, in order to compare the TPP's performance with all other practices in the host Health Authority, the change in the number of admissions for this group of practices is shown.

For each of the three comparisons, the P value shown records the statistical significance indicated by the test described above.

In addition, in each results table percentage change figures are presented for all TPPs added together to form one group, and with the comparator groups similarly added together. In the tables relating to TPPs with objectives, the percentage change figures are also presented for the groups of TPPs recorded as 'successful' and 'unsuccessful'.

Table 7 shows that 82% (9/11) of the Commissioner TPP sites with a main objective to reduce acute emergency admissions in 1996/7 were 'successful'. Cost and volume or sophisticated block contracts with the main acute providers were generally used and prices were usually calculated on FCEs at average specialty cost. The average population for the 'successful' TPP sites was 38,367 and the average number of practices was 3.7. It is interesting to note that while four of the 11 TPP sites were single practices, two of these were originally part of a single TPP.

Table 8 records the percentage change figures for these TPP sites and their comparators. The number of admissions of the TPP sites was often small which limits the scope for testing for statistical significance. However, the differences in percentage change between the 'groups' of 'successful' and 'unsuccessful' TPP sites and their comparators was significant. For example, across all hospital providers the number of emergency admissions for the 'successful' TPP sites decreased by 3.24%, in contrast to increases of 1.33% for the 'local' comparators group and 1.21% for all other practices in all the host Health Authorities. In both cases the difference in change between the TPP site group and the comparator group was statistically significant at the 1% level.

Tables 9 and 10 show the analysis results for the Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7. As noted above, for a range of reasons the impact in 1996/7 of the initiatives undertaken by these TPP sites was expected to be slight on the whole (see table 6). Hence, it is not surprising that only 33% (2/6) of the Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7 were 'successful'. Sophisticated block contracts with the main acute providers were generally used, although half the TPP sites moved away from pricing on FCEs at average specialty cost. The average population for the 'successful' TPP sites was 23,650 and the average number of practices was 2.5.

Table 7 Commissioner TPP sites with a main objective to reduce acute emergency admissions in 1996/7: site details, specialties, contract type and analysis finding.¹⁹

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cm1	1	19,000	medicine	cost and volume	FCEs	yes
Cm2	5	43,000	geriatrics	cost and volume	adm.	yes
Cm3 ²⁰	4	46,500	medicine for 75s plus	sophisticated block	FCEs	yes
Cm4	8	70,000	geriatrics	simple block	FCEs	yes
Cm5	3	23,000	medicine for 75s plus	sophisticated block	FCEs	yes
Cm6	8	79,300	medicine and surgery	sophisticated block	FCEs	yes
Cm7	2	40,000	medicine and surgery	cost per case	FCEs	yes
Cm8	1	16,000	medicine	cost and volume	FCEs	yes
Cm9 ²¹	1	8,500	medicine and surgery	cost and volume	FCEs	yes
Cm10 ²²	1	14,000	medicine and surgery	cost and volume	FCEs	no
Cm11	5	39,000	medicine and surgery	joint with HA ²³	FCEs	no
averages						
all TPPs	3.5	36,209				no
9 succ.	3.7	38,367				yes
2 not su.	3	26,500				no

Table 9 Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7: site details, specialties, contract type and analysis finding.²⁴

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cm12	1	12,300	medicine	sophisticated block	FCEs	yes
Cm13	4	35,000	medicine for 75s plus	sophisticated block	OBDs	yes
Cm14 ²⁵	3	30,000	geriatrics	cost per case	FCEs	no
Cm15	3	29,200	med. & surg. for 60s plus	sophisticated block	FCEs	no
Cm16	6	35,000	medicine and surgery	sophisticated block	FCEs	no
Cm17	1	12,000	medicine	cost per case	FCEs	no
averages						
all TPPs	3	25,583				no
2 succ.	2.5	23,650				no
4 not su.	3.3	26,550				no

¹⁹ HES data for one TPP site in this group is missing (Cm22).²⁰ Intended service change not achieved in 1996/7.²¹ This pilot practice went 'live' in 1995/6.²² Ibid.²³ Cm11 was classified as a commissioner because it had an independent contract with its main community trust, even though the TPP held a joint HA contract with its main acute trust.²⁴ HES data for one TPP site in this group is missing (Cm23).²⁵ Seven emergency geriatric admissions were made direct to community hospital in 1996/7.

Table 8 Commissioner TPP sites with a main objective to reduce acute emergency admissions in 1996/7: activity analysis results.²⁶

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7							
		Main provider			All providers				
		TPP	Local	P	TPP	Local	P	HA- wide	P
Cm1	454	-7.71	1.29	0.20	-5.42	7.75 -*	0.04	3.68	0.13
Cm2	699	-10.01	-1.41	0.18	-10.65	-3.67	0.22	-2.31	0.11
Cm3	546	-1.28	6.18	0.32	1.06	9.88	0.24	4.48	0.58
Cm4 ²⁷	779	-5.78	1.05	0.37	-3.93	1.23	0.48	3.42	0.18
Cm5	228	6.14	12.84	0.52	3.28	12.12	0.37	7.68	0.64
Cm6	2223	-4.54	1.22	0.08	0.84	5.84 -*	0.05	5.14	0.08
Cm7 ²⁸	657	-6.54	-1.47	0.35	-2.87	-0.92	0.69	2.76	0.24
Cm8	383	-14.36	-10.23	0.55	-16.24	-8.69	0.11	-2.66 -**	<0.01
Cm9	261	-4.21	-3.92	0.97	-2.22	-8.80	0.38	-2.81	0.94
Cm10	499	0.60	-3.92	0.50	1.62	-8.8	0.07	-2.91	0.41
Cm11	1247	14.03	7.41	0.39	7.36	11.81	0.50	6.40	0.77
all TPPs	7976	-2.19	-0.93	0.46	-0.94	0.33	0.37	1.13	0.12
9 succ.	6230	-5.67	-0.67	0.01	-3.24	1.33 **	<0.01	1.21 **	<0.01
2 not su.	1746	10.19	-2.57 **	<0.01	6.04	-6.76 **	<0.01	0.94	0.07

Table 10 Commissioner TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7: activity analysis results.²⁹

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7							
		Main provider			All providers				
		TPP	Local	P	TPP	Local	P	HA- wide	P
Cm12	507	3.75	5.60	0.78	5.43	6.17	0.91	5.01	0.95
Cm13	160	7.50	7.87	0.98	11.73	32.16	0.12	21.22	0.41
Cm14	289	3.46	1.80	0.85	5.82	3.61	0.81	5.10	0.94
Cm15	453	-0.88	-6.17	0.43	-0.85	-5.42	0.44	-2.56	0.77
Cm16	1346	15.90	2.58 **	<0.01	19.61	4.61 **	<0.01	2.32 **	<0.01
Cm17	146	22.60	6.23	0.23	4.23	1.44	0.76	1.24	0.74
all TPPs	2901	9.79	1.80 **	<0.01	11.13	1.71 **	<0.01	2.41 **	<0.01
2 succ.	667	4.65	5.77	0.85	7.16	8.54	0.82	6.79	0.95
4 not su.	2234	11.32	0.84 **	<0.01	12.18	0.35 **	<0.01	1.15 **	<0.01

²⁶ HES data for one TPP site in this group is missing (Cm22).

In the following tables statistical significance is noted as follows:

* = % change for TPP greater than for comparator group at the 5% level

** = % change for TPP greater than for comparator group at the 1% level

-* = % change for TPP less than for comparator group at the 5% level

-** = % change for TPP less than for comparator group at the 1% level

'Local' = Local comparator group and 'HA-wide' = All practices in the HA except for the TPP.

[†] The total number of admissions for the TPP site in the relevant specialties at its main provider in 1995/6.

²⁷ Data from one trust in the host HA was excluded from the analysis because 74% of its 1996/7 FCEs were missing specialty function codes.

²⁸ Cm7 is in Scotland and hence the analysis uses SMR1 data.

²⁹ HES data for one TPP site in this group is missing (Cm23).

Commissioner TPP sites with objectives to reduce acute emergency length of stay

Table 11 shows a range of approaches employed by the 11 Commissioner TPP sites with a main objective to reduce acute emergency length of stay in 1996/7.

Table 11 Summary of the activity focus and methods used by the Commissioner TPP sites with a main objective to reduce acute emergency length of stay in 1996/7.

TPP site	Activity focus	Main methods	Comment
Cm4	All specialties	Appointed a project nurse to examine discharge arrangements.	The project nurse resigned and the initiative was not pursued.
Cm7	Surgical specialties	Improved practice-based discharge planning arrangements, and early discharged post-operative patients to the local community hospital.	GP care at the local community hospital was increased.
Cm10	All specialties	Appointed a primary care liaison manager who facilitated early discharge of acute cases to the local community hospitals.	The site went 'live' in 1995/6. The establishment of a health and social services care team outside TP was reported to be the main achievement.
Cm12	All specialties	Instigated GP ward rounds at the main acute hospital.	Initiative started in September 1996, following the appointment of an additional GP partner. The TPP experienced difficulties in identifying patients on the wards.
Cm13	Medical specialties for the elderly	Appointed a project nurse who facilitated early discharge of acute cases to GP beds at the local community hospital.	The TPP reported that the biggest obstacle to better discharge arrangements was the lack of social services co-operation.
Cm14	Geriatrics	Appointed a utilisation nurse who facilitated early discharge to a TPP instigated rehabilitation facility, which included GP care, at the local community hospital.	The local community hospital rehabilitation facility comprised 16 beds funded by the TPP and 2 beds funded by the HA.
Cm15	All specialties for older patients	TPP initiated, rehabilitation team, based at the local community hospital, facilitated early discharge of acute cases.	Operational for only about three months during the second half of 1996/7.
Cm17	Medical specialties	Appointed a discharge liaison nurse who facilitated early discharge of acute cases to nursing home beds.	The number of nursing home beds used by the TPP was increased during 1996/7. The TPP provided a range of care support for the nursing home patients.
Cm18	Medical specialties	The main acute trust faxed a daily admissions list to the TPP GPs.	Although the main acute trust refused to agree a LOS sensitive contract, it did release £25,000 in anticipation of reduced LOS.
Cm19	Medical specialties	Appointed a nurse co-ordinator who facilitated early discharge of cases from the main acute hospital.	The nurse was appointed half way through 1996/7.
Cm20	All specialties, particularly elective THRs	Appointed a liaison nurse who facilitated early discharge of acute cases to the local community hospital.	

Community hospitals were used to receive early discharged acute patients by 55% (6/11) of the Commissioner TPP sites with a main objective to reduce acute emergency LOS, and additional nursing staff were introduced by 64% (7/11) of these pilots. Tables 13 and 14 show that 36% (4/11) of the Commissioner TPP sites with a main objective to reduce acute emergency LOS were 'successful'. All four 'successes' (Cm14, Cm17, Cm15 and Cm4) introduced new nursing roles and two of these TPPs instigated community hospital based rehabilitation initiatives. Six Commissioner TPP sites had a 'secondary' objective to reduce acute emergency LOS, and table 12 shows that nurse roles were again often introduced.

Table 12 Summary of the activity focus and methods used by the Commissioner TPP sites with a 'secondary' objective to reduce acute emergency length of stay in 1996/7.

TPP site	Activity focus	Main methods	Comment
Cm9	Fractured neck of femur	Introduced treatment protocols, co-ordinated by a primary care liaison manager.	The TPP went 'live' in 1995/6.
Cm2	Geriatrics	Increased use of GP beds at local community hospital, which is part of the main acute trust.	Initiative developed in collaboration with the main acute trust and started in November 1996.
Cm5	Geriatrics	Developed proactive care teams (PACTs) for specific service areas including the elderly.	PACTs were initially piloted at practice level. Main achievement reported was groundwork completed for 1997/8.
Cm6	All specialties	Introduced a hospital discharge team, increased use of pre-existing hospital-at-home care, and used nursing homes.	A discharge planning co-ordinator was appointed in August 1996, and the scheme went live in January 1997.
Cm8	Medical specialties	Planned to use social care co-ordinator to facilitate early discharge.	The objective was not pursued because the main provider refused to introduce LOS sensitive pricing.
Cm16	Medical specialties	Planned to introduce GP beds at the local hospital.	No action was taken because, the TPP reported, it would have been necessary to close beds at the main acute hospital.

Tables 15 and 16 show that 66% (4/6) of the Commissioner TPP sites with a 'secondary' objective to reduce acute emergency LOS were 'successful'. One of the four 'successes' (Cm16) took no action to achieve the objective because

in order to fund new GP beds at the local community hospital it would have been necessary to close beds at the main acute hospital. The three 'successes' that took action (Cm9, Cm5 and Cm6) all introduced new nursing roles, and in the two multi-practice sites the nursing roles were part of larger care teams.

Table 13 Commissioner TPP sites with a main objective to reduce acute emergency LOS in 1996/7: site details, specialties, contract type and analysis finding.³⁰

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cm14	3	30,000	geriatrics	cost per case	FCEs	yes
Cm17 ³¹	1	12,000	medicine	cost per case	FCEs	yes
Cm15	3	29,200	med. & surg. for 60s plus	sophisticated block	FCEs	yes
Cm4	8	70,000	medicine and surgery	simple block	FCEs	yes
Cm19	1	25,000	medicine	cost and volume	OBDs	no
Cm12 ³²	1	12,300	medicine	sophisticated block	FCEs	no
Cm20	1	15,000	elective THRs	cost and volume	FCEs	no ³³
Cm10 ³⁴	1	14,000	medicine and surgery ³⁵	cost and volume	FCEs	no
Cm7	2	40,000	surgery	cost per case	FCEs	no
Cm18 ³⁶	1	11,600	medicine	simple block	FCEs	no
Cm13	4	35,000	medicine for 75s plus	sophisticated block	OBDs	no
averages						
all 11	2.4	26,736				yes
4 succ.	3.8	35300				yes
7 not su.	1.6	21841				no

Table 15 Commissioner TPP sites with a 'secondary' objective to reduce acute emergency LOS in 1996/7: site details, specialties, contract type and analysis finding.

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cm9 ³⁷	1	8,500	Fractured neck of femur ³⁸	cost and volume	FCEs	yes
Cm5	3	23,000	geriatrics	sophisticated block	FCEs	yes
Cm6	8	79,300	medicine and surgery	sophisticated block	FCEs	yes
Cm16	6	35,000	medicine and surgery	sophisticated block	FCEs	yes
Cm2 ³⁹	5	43,000	geriatrics	cost and volume	adm.	no
Cm8	1	16,000	medicine	cost and volume	FCEs	no
averages						
all 6	4	34,133				yes
4 succ.	4.5	36450				yes
2 not su.	3	29500				no

³⁰ HES data for one TPP site in this group is missing (Cm24).³¹ Figures for the second main acute hospital are shown.³² The aim was to reduce OBDs for all activity at the main provider by 5% to 10% by reducing LOS for, in the main, emergency medical admissions. Total OBDs across all specialties decreased by 4.1% at main provider.³³ Note: only 8 THRs are recorded for the TPP in 1995/6. In addition, despite the TPP's increase in average LOS at the MAH1, the TPP's average LOS was nearly 17% lower than that for the local comparator group at the MAH1 in 1996/7, and this suggests that the TPP did have an impact on MAH1 bed use for THR cases compared to the comparators.³⁴ This pilot practice went 'live' in 1995/6.³⁵ The average LOS for the pilot practice was relatively low in 1995/6.³⁶ Note very small local comparator group.³⁷ This pilot practice went 'live' in 1995/6.³⁸ Emergency and transfer admissions.³⁹ The average LOS per emergency geriatric admission for the TPP was substantially lower than that for the local comparator group at the main provider, in each year. Not a great concern because the contract currency was admissions.

Table 14 Commissioner TPP sites with a main objective to reduce acute emergency LOS in 1996/7: activity analysis results.⁴⁰

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7				
		Main provider		All providers		
		TPP	Local	TPP	Local	HA- wide
Cm14	289	-30.80	-4.57	-28.39	-2.74	0.25
Cm17	146	-21.65	2.28	-8.84	-2.41	-2.33
Cm15	453	-15.27	1.26	-14.26	4.46	14.05
Cm4 ⁴¹	2513	-8.28	-1.35	-7.21	-1.49	4.64
Cm19	521	6.71	5.50	-0.89	4.32	0.70
Cm12	507	-7.91	-19.18	-8.53	-18.56	-11.17
Cm20 ⁴²	6	15.46	2.51	8.26	2.87	-2.27
Cm10	499	28.69	4.69	15.90	2.29	3.10
Cm7 ⁴³	347	24.34	0.26	17.44	0.87	-0.47
Cm18	292	0.68	-35.65	-2.63	-26.04	-8.17
Cm13	160	21.44 ⁴⁴	-17.70	30.36	-7.87	7.32
all 11	3401	-5.55	-3.28	-4.89	-1.23	0.19
4 succ.	2332	-11.89	-2.83	-10.65	-0.12	4.24
7 not su.	5733	9.56	-4.44	6.45	-3.05	-2.39

Table 16 Commissioner TPP sites with a 'secondary' objective to reduce acute emergency LOS in 1996/7: activity analysis results.

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7					
		Main provider		All providers			
		TPP	Local	TPP	Local	P	HA- wide
Cm9	8 ⁴⁵	-18.52	28.38	-18.52	26.60		-6.65
Cm5	185	-4.94	6.47	-3.98	6.79	0.82	4.99
Cm6	2223	-11.90	-3.45	-1.72	-0.97	0.99	-0.50
Cm16	1346	-0.65	1.97	-1.22	0.51	0.98	-9.35
Cm2	699	10.04	-3.25	1.56	-6.57	0.86	-7.38
Cm8	383	44.48	10.84	26.54	2.88	0.78	-3.39
all 6	4.844	3.27	4.70	-0.60	0.33	0.99	-3.08
4 succ.	3.762	-0.21	4.31	-2.30	0.50	0.97	-2.94
2 not su.	1.082	17.51	5.56	8.57	0.19	0.89	-4.01

⁴⁰ HES data for one TPP site in this group is missing (Cm24).[†] The total number of admissions for the TPP site in the relevant specialties at its main provider in 1995/6.⁴¹ Data from one trust in the host HA was excluded from the analysis because 74% of its 1996/7 FCEs were missing specialty function codes.⁴² The statistical test is not presented because there were so few admissions for the TPP.⁴³ Cm7 is in Scotland and hence the analysis uses SMR1 data.⁴⁴ This increase in average LOS was due to an increase in the small number of cases with a LOS of more than 60 days. Two cases (totalling 212 OBDs) in 1995/6 and 8 cases (totalling 878 OBDs) in 1996/7 had a LOS of more than 60 days. When these cases are excluded, the average LOS for emergency medical admissions, for patients aged 75 years and over, at the main acute trust decreased for the TPP by 9.6%.⁴⁵ The statistical test is not presented because there were so few admissions for the TPP.

Co-purchaser TPP sites with objectives to reduce acute emergency admissions

Table 17 shows that the two Co-purchaser TPP sites with a main objective to reduce acute emergency admissions in 1996/7 used different approaches.⁴⁶ Neither TPP site regarded itself as being fully 'live'. However, table 15 shows that both these TPP sites were 'successful' in terms of the analysis.

Table 17 Summary of the activity focus and methods used by the Co-purchaser TPP sites with a main objective to reduce acute emergency admissions in 1996/7.⁴⁷

TPP site code	Activity focus	Main methods	Comment
Cp1	Medical specialties	Initiated nursing home and convalescent home use.	Budget setting and contracting difficulties were not resolved, and hence 1996/7 was reported to be best described as a 'shadow' year. Nursing home activity was funded by the HA.
Cp2	All specialties	Increased out-of-hours care by the TPP GPs.	'Essentially a preparatory year' with developments financed by the HA. TPP planned to have independent main acute contract in 1997/8.

Table 18 shows that the two Co-purchaser TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7 both used nursing homes. Table 17 shows that neither of these TPP sites were 'successful' in terms of the analysis.

Table 19 Co-purchaser TPP sites with a main objective to reduce acute emergency admissions in 1996/7: site details, specialties, contract type and analysis finding.⁴⁸

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cp1	1	6,900	medicine	simple block	FCEs	yes
Cp2	3	20,000	medicine and surgery	sophisticated block	FCEs	yes
average both	2	13,450				yes

Table 21 Co-purchaser TPP sites with a secondary objective to reduce acute emergency admissions in 1996/7: site details, specialties, contract type and analysis finding.

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cp3 ⁴⁹	3	28,000	med. & surg. for 75s plus	sophisticated block	FCEs	no
Cp4	1	10,200	medicine	simple block	FCEs	no
average both	2	19,100				no

⁴⁶ A third Co-purchaser TPP site had a main objective to reduce acute emergency admissions, but is omitted here because it was excluded from the HES analysis because of data quality problems.

⁴⁷ TPP Cp9 is omitted from table 17 because the TPP is excluded from the analysis because the HES data for the host Health Authority was incomplete. TPP Cp9 reported in the second round interviews (March 1997) that it had instigated a link with Social Services so that the GPs on call could contact Social Services at any time about mainly elderly patients who would otherwise be admitted to hospital for social reasons. However, two months into 1996/7 the GP co-operative was formed which had increased the number of GPs on the on call rota from 10 to about 100. This change was perceived to have weakened the potential for the initiative. It was also noted that the number of 'social' admissions had always been few.

⁴⁸ HES data for one TPP site in this group is missing (Cp9).

⁴⁹ Elective admissions at the main community trust were also included within the scope of the initiative.

Table 18 Summary of the activity focus and methods used by the Co-purchaser TPP sites with a 'secondary' objective to reduce acute emergency admissions in 1996/7.

TPP site code	Activity focus	Main methods	Comment
Cp3	All specialties for the elderly.	Use of a nursing home as an alternative to acute or community hospital admissions.	Small scale only, funded from an ECR budget. Initially instigated because on one occasion no hospital beds were available.
Cp4	Medical specialties	Initiated nursing home use, and employed an additional nurse.	Budget setting and contracting difficulties were not resolved, and hence 1996/7 was reported to be best described as a shadow year. Nursing home activity was funded by the HA

The Co-purchaser TPP Cp5 has been excluded from the above 'objectives' tables because although the TPP originally intended to actively manage emergency admissions, the TPP decided not go 'live' in 1996/7, and so did not pursue this objective.

Table 20 Co-purchaser TPP sites with a main objective to reduce acute emergency admissions in 1996/7: activity analysis results.⁵⁰

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7							
		Main provider			All providers				
		TPP	Local	P	TPP	Local	P	HA- wide	P
Cp1	308	-11.36	1.61	0.08	-10.54	0.45	0.14	3.71	0.05
Cp2	1342	-12.52	-0.96 *	0.01	-12.93	-2.53 *	0.02	-6.61	0.06
both	1650	-12.30	1.19 **	<0.01	-12.52	-0.07 **	<0.01	-1.38 **	<0.01

Table 22 Co-purchaser TPP sites with a secondary objective to reduce acute emergency admissions in 1996/7: activity analysis results.

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7							
		Main provider			All providers				
		TPP	Local	P	TPP	Local	P	HA- wide	P
Cp3	309	7.44	-2.09	0.94	7.29	-2.00	0.96	-5.95	1.00
Cp4	322	23.60	1.61 *	0.02	23.49	0.45 *	0.01	3.22 *	0.03
both	631	15.69	0.89 *	0.02	15.43	-0.05 *	0.01	0.52 *	0.02

⁵⁰ HES data for one TPP site in this group is missing (Cp9).

[†] The total number of admissions for the TPP site in the relevant specialties at its main provider in 1995/6.

Co-purchaser TPP sites with objectives to reduce acute emergency length of stay

Table 23 shows that nursing home beds were often used by the four Co-purchaser TPP sites with a main objective to reduce acute emergency length of stay in 1996/7.

Table 23 Summary of the activity focus and methods used by the Co-purchaser TPP sites with a main objective to reduce acute emergency length of stay in 1996/7.

TPP site code	Activity focus	Main methods	Comment
Cp1	Medical specialties	Initiated nursing home and convalescent home use.	Budget setting and contracting difficulties were not resolved, and hence 1996/7 was reported to be best described as a 'shadow' year. Nursing home activity was funded by the HA.
Cp4	Medical specialties	Initiated nursing home use, and employed an additional nurse.	Budget setting and contracting difficulties were not resolved, and hence 1996/7 was reported to be best described as a 'shadow' year. Nursing home activity was funded by the HA.
Cp5	Medical specialties	Appointed a social worker/care worker (joint funded with Social Services) and supported bid to instigate a medical assessment unit at the main acute provider.	TPP did not go 'live' in terms of purchasing, in part due to budget setting difficulties.
Cp7	Medical specialties	Initiated nursing home use.	Budget setting and contracting difficulties were not resolved, and hence 1996/7 was reported to be best described as a 'shadow' year. Nursing home activity was funded by the HA.

The results tables 24 and 25 show that 75% (3/4) of the Co-purchaser TPP sites with a main objective to reduce acute emergency LOS were 'successes'.

Table 24 Co-purchaser TPP sites with a main objective to reduce acute emergency LOS in 1996/7: site details, specialties, contract type and analysis finding.

TPP site code	number of pract.	population	specialties affected by objective	contract type	contract currency	HES analysis 'success'
Cp5	5	45,000	medicine	sophisticated block	FCEs	yes
Cp1	1	6,900	medicine	simple block	FCEs	yes
Cp7	2	9,400	medicine	simple block	FCEs	yes
Cp4	1	10,200	medicine	simple block	FCEs	no

averages

all 4	2.25	17.875				no
3 succ.	2.7	20.433				yes

Resource Implications

One measure of resource use concerns the main acute contract. Table 26 shows that 11 of the 15 'successful' Commissioner TPP sites held sophisticated block or cost and volume contracts. Prices relating to the relevant activity were based on FCEs at average specialty cost in 10 of the 15 contracts. Less than half (6/13) these main acute contracts reported cost savings to have been achieved or to have met predicted levels. This finding is not surprising. Robinson *et al.*, 1998, reported the difficulty experienced by TPPs that wished to move away from contracting on FCEs. The 'successful' TPPs show that progress made in changing service provision need not be accompanied by a contract currency which reflects the activity changes.

Another measure of resource use is the overall change in total OBDs across all NHS hospital providers. However, it is not necessarily the case that total OBDs would be expected to decrease as a result of the changes introduced by the TPPs. This is because TPPs often attempted to substitute community hospital OBDs for acute hospital OBDs. TPP Cm14 shows that the successful early discharge of emergency geriatric cases from an acute hospital to a community hospital rehabilitation facility can result in an increase in overall OBDs.

Table 25 Co-purchaser TPP sites with a main objective to reduce acute emergency LOS in 1996/7: activity analysis results.

TPP site code	Number of TPP admissions [†]	% change between 1995/6 and 1996/7				
		Main provider		All providers		
		TPP	Local	TPP	Local	HA- wide
Cp5	843	-9.18	6.26	-13.06	1.83	2.00
Cp1	308	-25.13	-12.40	-11.83	-11.39	-6.71
Cp7	250	-16.17	-6.59	-11.28	-5.37	-8.10
Cp4	322	1.75	-12.40	6.26	-11.39	-6.71
all 4	749	-11.63	-8.67	-10.91	-7.63	-6.05
3 succ.	1071	-12.34	-7.02	-11.40	-6.23	-5.77

[†] The total number of admissions for the TPP site in the relevant specialties at its main provider in 1995/6.

Table 26 'Successful' Commissioner TPP sites and their main acute contracts⁵¹

TPP site code	Main acute contract type for activity relating to objectives	Main acute contract currency for activity relating to objectives	Main acute contract cost outcome / comment
Cm9	cost and volume	FCEs	Contract set on the basis of a 5% reduction in FCEs from reduced emergency admissions. Cost savings were not as predicted, but savings were achieved.
Cm1	cost and volume	FCEs	Cost savings conformed to the levels predicted.
Cm2	cost and volume	admissions	Cost savings were not as predicted.
Cm3	sophisticated block	FCEs	Cost savings were not as predicted.
Cm4	simple block	FCEs	
Cm5	sophisticated block	FCEs	Cost savings were not as predicted.
Cm6	sophisticated block	FCEs	Activity and unit costs were as predicted. TPP estimated a cost saving from the hospital-at-home activity.
Cm7	cost per case	cost per case	
Cm8	cost and volume	FCEs	Data missing.
Cm12	sophisticated block	FCEs	Cost savings conformed to the levels predicted.
Cm13	sophisticated block	OBDs	Cost savings were not as predicted.
Cm14	cost per case	cost per case	TPP reported a slight cost saving resulting from the use of community hospital beds. Although the main acute contract pricing was LOS sensitive for geriatrics, pricing on FCE numbers was problematic and the possibility of arbitration was considered.
Cm15	sophisticated block	FCEs	Cost savings conformed to the levels predicted.
Cm16	sophisticated block	FCEs	Activity and unit costs were not as predicted.
Cm17	cost per case	cost per case	Cost savings were not as predicted.

5 Discussion

All 20 Commissioners included in the activity data analysis had objectives relating to emergency admissions or length of stay. The analysis findings indicate that 65% (11/17) of the Commissioners with a main or secondary objective to reduce acute emergency admissions were 'successful'. In addition, 47% (8/17) of the Commissioners with a main or secondary objective to reduce acute emergency length of stay were also 'successful'. Four factors should be taken into account when considering these findings:

- The Commissioners faced a difficult challenge. In order to reduce acute hospital activity, it was necessary to introduce alternative services, such as community nursing teams or community hospital GP beds facilitated by liaison nurses. At the same time it was necessary to fund this new activity by reducing expenditure on acute hospital services. This predicament constrained initiatives. For example, some Commissioners felt unable to initiate early discharge initiatives because their main provider would not agree to LOS sensitive contracting.
- The Commissioners found it difficult to move away from the common practice of basing the price of inpatient activity on FCE numbers. The prices relating to the relevant activity covered by the main acute contract were based on FCEs at average specialty cost for 66% (10/15) of the 'successful' Commissioners. In addition, cost savings were reported to have been achieved or to have met predicted levels in only six of these main acute contracts. Thus, the financial sustainability of service changes is uncertain.
- Many Commissioners introduced new services during 1996/7, which started on a small scale and developed during the year. Hence, any change in activity measured year on year is likely to underestimate the achievement.
- On average the 20 Commissioner TPP sites, with objectives relating to emergency admissions or length of stay, comprised 3 practices and covered a population of 30,170.⁵²

These results suggest that TPP 'commissioning' can be an effective method for GPs to bring about change to their use of secondary care services. The Commissioner TPP sites demonstrated great initiative by starting to change the pattern of hospital use in order to meet local objectives. At the same time most sites were not able to negotiate length of stay sensitive pricing which is vital for the efficient use of available funds in the long term.

Six of the eight Co-purchasers included in the activity data analysis had objectives relating to emergency admissions or length of stay. The analysis findings indicate that 50% (2/4) of the Co-purchasers with a main or secondary objective to reduce acute emergency admissions were 'successful'. In addition, 75% (3/4) of the Co-purchasers with a main or secondary objective to reduce acute emergency length of stay were also 'successful'.

⁵¹ Sources: TP-NET first contracting methods survey 1996/7, TP-NET second contracting methods survey December 1997 plus interviews with TPP staff.

⁵² These figures compare to an average of 3 practices covering a population of 31,300 for all 'first-wave' TPPs (Source: Mays *et al.* 1998 b, p17).

These results also suggest that TPP 'co-purchasing' may be an effective method for GPs to bring about change to their use of secondary care services. However, any change in activity cannot be considered in isolation and four factors are important:

- Five of the six Co-purchasers with objectives relating to emergency admissions or length of stay wanted to operate as Commissioners rather than Co-purchasers. For these TPP sites existence as Co-purchasers in 1996/7 had been necessary either because of budget setting difficulties or a requirement for further development before going 'live' as Commissioners.
- The innovations introduced by the Co-purchasers were funded by the host Health Authorities, and did not have financial repercussions for the affected hospital providers.
- The TP-NET definition of 'co-purchasing' emphasises a role for the TPPs in 'attempting to change HA purchasing activities'. However, four of the six Co-purchasers with objectives relating to emergency admissions or length of stay initiated the use of nursing home beds as their main innovation, which was funded by the host HAs. Hence, although Co-purchaser TPPs have undoubtedly influenced their HAs in many ways, when it came to changing the use of hospital services the impact of the Co-purchasers on the behaviour of their HAs was equivocal.
- The average size of the six Co-purchasers with objectives relating to emergency admissions or length of stay was small, with 2.5 practices and a population of 19,917, and the number of sites was of course small too.

Primary Care Groups and secondary care

The White Paper *The New NHS* acknowledges Total Purchasing as one of the commissioning models on which Primary Care Groups (PCGs) have been developed (Secretary of State for Health, 1997). Total Purchasing was demanding for GPs who had to devote considerable time and energy, and accept new responsibilities. These TPP GPs were of course all volunteers while all GPs will belong to a PCG. Given that some TPPs were not interested in commissioning secondary care (table 3), a considerable proportion of PCGs may be content to function at Level I, rather than take on the challenge of being responsible for commissioning. However, PCGs at Level II will be similar to Commissioner TPPs with regard to their budgetary responsibility for the purchase/commissioning of healthcare.

The extent to which Level II PCGs may be able to emulate the early changes made by Commissioner TPPs to hospital service use will be greatly influenced by the level of co-operation from the acute hospital trusts. The range of intermediate services instigated by the Commissioner TPPs will only be sustainable if appropriate resources are released from the acute hospital sector. In the past there has been no clear obligation for acute trusts to acknowledge financial implications relating to reductions in admissions or length of stay, and the longer term service agreements will require careful management given the new 'statutory duty of partnership'.

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