NIGHT TIME DEMAND ANALYSIS AT CAT 2.5 SHELTERED SCHEMES FOR THE PERIOD FROM 1st NOVEMBER 2009 TO 28th DECEMBER 2010 (423 NIGHTS)

<u>Key:</u> ADC – Arthur Dann Court; BH – Bresler House; HC – Hale Court; IGC – Ian Gibson Court; JMC – John Marshall Court; NG – Nicholson Gardens; SJC – St John's Court.

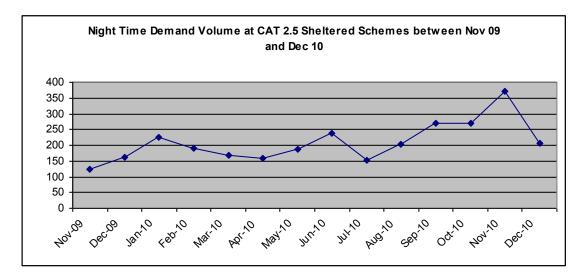
	ADC	BH	НС	IGC	JMC	NG	SJC	Total:	%age
Demand Volume	289	153	560	215	1031	492	182	2922	/uuge
Average Nightly Demand	0.68	0.36	1.32	0.51	2.44	1.16	0.43	6.91	
Average Response Times:	0.00	0.00	1.02	0.01		1.10	0.10		
Mobile Team From 01/11/09 to 04/01/10 <i>(65 Nights)</i>								08:50	
On Site Staff (From 05/01/10 to 28/12/10 (358 Nights)								02:59	
Number of Nights when no Demands have been Made by Residents (Period from 05/01/2010 to 28/12/2010)	232	269	128	230	57	161	263	1340	
Number of Unused or Unallocated Staff Hours Occurring as a Result (358 nights x 9 hours per night)	2088	2421	1152	2070	513	1449	2367	12060	
Demand by Type:									
Resident has requested Personal or Physical Related Support	61	24	162	26	396	95	55	819	28%
Alarm activated in Error	108	53	107	88	128	87	36	607	21%
Resident wishes to Ask for or Provide Information About	23	27	102	30	157	185	23	547	19%
Resident has requested Domestic Related Support	18	15	59	27	183	42	10	354	12%
Resident is Lonely and/or needs Reassurance	19	9	34	5	86	25	19	197	7%
Resident has Requested Attendance of Health Professional	9	11	34	15	32	11	18	130	4%
Access to Scheme Requested	4	5	9	10	15	33	11	87	3%
No Reason	34	0	5	0	19	4	1	63	2%
Resident has been admitted to Hospital as a Result of Call	9	7	5	8	12	5	6	52	2%
Wanderer Alert Activated	2	0	40	0	0	1	0	43	1%
Other	2	2	3	6	3	4	3	23	1%
Resident Response									
Clear Speech	220	77	394	160	884	360	95	2190	75%
Unclear or No Speech	69	76	166	55	147	132	87	732	25%
Action by Scheme									
Resident was Visited as a Result of Request for Support	207	126	462	151	788	300	156	2190	75%
Residents Support Issue was Dealt with Remotely	81	24	94	62	237	174	24	696	24%
No Action Required	1	3	4	2	6	18	2	36	1%

Comparison/Analysis:

- The current level of demand at John Marshall Court has resulted from several residents with unusually high support needs and this reached a peak during the Aug to Nov period. One of these residents has subsequently moved into residential care but average nightly demand rose from 4.4 to 6.9 during the monitoring period as a consequence of this.
- John Marshall Court was covered by awake on-site night staff from 29/09/2010 to 14/12/2010 to address this issue
- Response time for arrival at resident's flat by on-site staff is approx 6 minutes faster than for the Mobile team.
- The largest single volume of demand is for Personal or Physical related support, accounting for 28%, while Domestic related support covers a further 12%,
- Residents requesting, or providing night staff with information accounts for 19% of overall demand.
- 158 falls were recorded during the period, support staff resolved 108 of these, 42 required the involvement of Health Professionals and 8 resulted in hospitalisation.
- Demands of an urgent nature, resulting in the resident being hospitalised are fairly low in comparison with other demand types accounting for 2% of overall demand.
- 21% of all demand resulted from Residents activating their alarms in error.
- The figure of 1340 nights refers to the number of nights, across all seven schemes, from the 5th January onwards when the on-site night service was re-introduced, when no demands were received throughout the whole night time period from 22:00 to 07:00 (9 hours). In terms of unallocated staff time this equates to a total of 12,060 unused staff hours.
- The information presented here does <u>not</u> take into account any "scheme generated demand," these are cases where a Scheme Manager has specifically requested the night staff to call or check on a particular resident at pre-arranged times during the night due to illness or following a period of hospitalisation.

Night Time Demand Volume

The attached trend graph highlights the increasing volume of night time demand within the CAT 2.5 schemes, this is partly accounted for by the rising level of demand at John Marshall Court as already discussed although the general trend is an increasing one at a number of the seven schemes. The peak in November was caused by excessive use of the alarm system by a resident in ADC during this period; he has subsequently left the scheme. The attached tables; split into Mobile Night Team (MNT) and Post MNT periods also highlight this.



Mobile Night Team 01/11/2009 - 04/01/2010

<u> </u>									
Month	ADC	BH	HC	IGC	JMC	NG	SJC	Tot	Average
Nov-09	10	10	26	12	19	23	24	124	4.13
Dec-09	7	13	34	29	37	25	16	161	4.67

Jan-10 (to 04/01)	0	7	12	0	7	2	2	30	4.85
Totals:	17	30	72	41	63	50	42	315	

For the 65 nights that the MNT operated they responded to 315 demands or requests for support. Prior to the commencement of the MNT the average number of demands per night was 3 but this rose to 5 during the time that this team was in operation.

Month	ADC	BH	HC	IGC	JMC	NG	SJC	Tot	Average
Jan-10 (from 05/01)	9	20	41	6	73	31	14	194	5.53
Feb-10	8	5	81	10	56	22	10	192	5.84
Mar-10	6	15	53	15	48	23	9	169	5.76
Apr-10	8	5	37	8	51	37	12	158	5.68
May-10	17	7	35	16	62	35	15	187	5.73
Jun-10	17	8	25	24	115	43	5	237	6.00
Jul-10	5	5	25	19	54	26	17	151	5.87
Aug-10	23	11	27	7	89	34	13	204	5.94
Sep-10	16	17	33	18	163	17	7	271	6.22
Oct-10	45	7	39	23	102	48	5	269	6.43
Nov-10	96	12	64	19	98	64	17	370	6.88
Dec-10 (to 28/12)	22	11	28	10	56	62	16	205	6.91
Tot	272	123	488	175	967	442	140	2607	

Post MNT 05/01/2010 - 28/12/2010

From 05/01/2010 to 28/12/2010 (358 nights) following the reinstatement of the on-site service there were a further 2607 demands or requests for support. The average number of demands per night has continued to rise since the on-site service was re-introduced and this has varied depending on the volume of demand in any given month but current average, based on the overall monitoring period from Nov 09 to Dec 10, stands at 6.9 demands per night.

Demand Breakdown by Type and Frequency

The following table shows a breakdown of Demand by Type & Frequency for both MNT and Post MNT periods including a percentage for each, for clarity, the MNT was introduced from 1st November 2009 and operated until 4th January 2010, when the on-site service was reinstated:

Night Time Demands at CAT	2.5 Sche	mes MNT	and Post MNT by	Type and	Frequenc	;y
	MNT:	%age:	Post MNT:	%age:	Total:	%age
Demand by Type:						
Resident has requested Personal or Physical Related Support	61	19%	758	29%	819	28%
Alarm activated in Error	92	29%	515	20%	607	21%
Resident wishes to Ask for or Provide Information About	48	15%	499	19%	547	19%
Resident has requested Domestic Related Support	22	7%	332	13%	354	12%
Resident is Lonely and/or needs Reassurance	28	9%	169	6%	197	7%
Resident has Requested Attendance of Health Professional	31	10%	99	4%	130	4%
Access to Scheme Requested	13	4%	74	3%	87	3%
No Reason	0	0%	63	2%	63	2%
Resident has been admitted to Hospital as a Result of Call	10	3%	42	2%	52	2%
Wanderer Alert Activated	0	0%	43	2%	43	1%

Other	10	3%	13	0%	23	1%
Total	315	100%	2607	100%	2922	100%

Comparison/Analysis:

- Demands or requests for support of a personal or physical related nature were 10% lower during the period the mobile night team were in operation. This may be due in part to the subsequent situation that has developed at John Marshall Court regarding those residents with unusually high support needs.
- Error demand has reduced by 9% since an on-site service was re-introduced.
- Provision of, or requests for, information by residents has increased by 4% since the reintroduction of the on-site service.
- Demands for domestic related support have increased by 6% since the reintroduction of the on-site service.
- Demands resulting from residents feeling lonely or needing reassurance have reduced by 3% since the reintroduction of the on-site service.
- Requests by residents for the attendance of Health Professionals were 6% higher during the period that the mobile night team were in operation.

Care needs to be taken when making direct comparisons between these two sets of figures, it should be remembered that the mobile night team was in operation for a total of 65 nights only while the on-site service information has been complied over the subsequent period of 358 nights.

Demand for personal or physical related support has increased significantly during this period and this in itself will have had the effect of reducing other demand percentages. The attached table comparing and contrasting error demand with those of a personal or physical related nature illustrates this point. Volume of error demand has actually remained fairly consistent throughout this period at about 40 per month but the percentage has been affected by variation in other demand types.

Month	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Totals
Error Demand	36	54	30	29	40	34	39	33	38	31	54	63	103	23	607
Care Related Demand	31	23	63	60	26	29	51	62	43	73	126	90	90	52	819

Resident Response following Activation of Alarm

Analysis was performed of residents responses following the activation of their alarm and highlights the volume of instances where it was clear from what was said what the support need required was and where it was not, both MNT and Post MNT.

Reside	Resident Response Type MNT and Post MNT										
MNT: %age: Post MNT: %age: Total: %age											
Resident Response											
Clear Speech	198	63%	1992	76%	2190	75%					
Unclear or No Speech	117	37%	615	24%	732	25%					
Total	315	100%	2607	100%	2922	100%					

Comparison/Analysis:

The volume of instances where the support required by the resident was clear from the communication exchanged via the intercom was 13% higher for the on-site service than for the period the MNT were in operation but it should be remembered the on-site service has been measured over a much longer period of time than the MNT.

Resulting Action by Night Staff

Analysis has been performed of the resulting action taken by night staff following requests for support from residents, both MNT and Post MNT.

Resulting Ac	ction by N	light Time S	Staff MNT and Po	st MNT		
	MNT:	%age:	Post MNT:	%age:	Total:	%age
Action by Scheme						
Resident was Visited as a Result of Request for Support	229	73%	1961	75%	2190	75%
Residents Support Issue was Resolved Remotely	85	27%	611	23%	696	24%
No Action Required	1	0%	35	1%	36	1%
Total	315	100%	2607	100%	2922	100%

Comparison/Analysis:

Although they were in operation for a short period of time only, it would appear that the MNT were able to resolve a higher percentage of support requests remotely than the on-site service has subsequently been able to, 73% of support requests required a visit during the period of MNT operation, this has risen to 75% since the reintroduction of the on-site service, an increase of 2%.

Resolution of 'Error' Calls.

Further analysis has been performed on the volume of error calls to assess how they were resolved by both the MNT and the on-site service.

Resolution	of 'Errc	r' Calls				
	MNT:	%age:	Post MNT:	%age:	Total:	%age
Error Calls with Clear Speech	37	40%	319	62%	356	59%
Error Calls with Unclear Speech	55	60%	196	38%	251	41%
Error Calls Resolved Remotely	44	48%	271	53%	315	52%
Error Calls Visited	48	52%	242	47%	290	48%
Error Calls Not Visited	0	0%	2	0%	2	0%
Error Calls with Unclear Speech Resolved Remotely	12	13%	9	2%	21	3%
Error Calls With Clear Speech Visited	5	5%	49	10%	54	9%
Total Error Calls:	92		515		607	

Comparison/Analysis:

- Cases of error calls made where it was possible to hear or understand the response from the resident via the intercom were 22% higher for the on-site service than for the MNT.
- Error calls resolved remotely increased by 5% for the period that the on-site service was reintroduced.
- Cases of error calls with unclear speech by the resident that were still resolved remotely were 13% for the MNT but only 2% for the on site service, a difference of 11%. In these cases the night staff will try and contact the resident by either dialling back into the intercom system or telephoning the residents own phone number. The MNT would have made greater efforts to contact the resident in this way as it might save driving to a scheme to make a visit. On-site staff it would probably find it easier to walk down the corridor and check on the resident personally.
- Cases of Clear speech by the resident where the night staff still made a visit was 5% for the MNT and 10% for the on-site staff, a difference of 5%, it is unclear from the data why either the MNT or the on-site staff would still have visited the resident in these cases.

Overlapping Demand

One of the concerns raised by residents during the consultation period regarded overlapping night time demand and the capacity of a mobile night team to deal with it.

To try and address this issue a sample analysis of *potential* overlapping demand based on calls from residents requesting support, received in the period from 01/05/2010 to 31/10/2010 has been performed.

It should be remembered that the service used on-site staff within schemes throughout this period and indications from the analysis already performed suggest responses from an onsite and a mobile team will not always be the same, so true comparison is not possible but we have made an assumption that any demands falling within 15 minutes of each other could have the *potential* to be overlapping demands and based our analysis on these figures.

Unlike the rest of this analysis, there is an inevitable element of subjectivity with much of this as we are comparing what *could* have happened if a mobile team had been in place against what *did* happen with an on-site service response and different types of service will respond in different ways to the demands they receive.

All John Marshall Court demand has been excluded from this analysis due to the special conditions operating in that scheme during this period.

Month	Total calls in Month	Potential Overlaps	Number of Calls Involved	Calls in Same Scheme
May-10	125	21	48	6
Jun-10	123	12	34	8
Jul-10	97	14	37	7
Aug-10	115	16	33	6
Sep-10	108	11	27	6
Oct-10	166	28	67	9
Total:	734	102	246	42
Average	122.3	17.0	41.0	7.0

The outcome of this analysis is as follows:

Volume of Overlapping Demand in CAT 2.5 Schemes 01/05/2010 - 31/10/2010

There were 102 cases of overlapping demand involving a total of 246 calls for support. The analysis revealed several instances of 3 or 4 consecutive demands falling within 15 minutes of each other so we have included these as *potentially* overlapping demands, hence the disparity between the number of potential overlaps and the number of actual calls involved.

From the 102 cases of overlapping demand, 42 occurred within the same scheme, this does not take into account those cases where a single resident has made a series of calls within a short space of time in relation to the same support issue, these have been treated as a single demand.

From the overall total of 246 calls received 58 demands were found to be errors and 51 demands were resolved remotely.

In cases where overlapping demand is received from different schemes a mobile night team would need to split up to deal with them both. This would not be an issue for an on-site service as staff would already be available in both of the schemes.

In cases where overlapping demand is received in the same scheme the mobile team would be able to split up and deal with both at the same time. This would be more of a problem for a single person on-site service as they are the only resource immediately available and would either need to prioritise the demand or call on other available support such as the Independent Living Service. A mobile night team *may* have needed to split up to travel separately to different schemes on a *possible* 44 occasions but, as already stated, a mobile team may have acted differently to an on-site service to resolve any of these support issues so this can be no more than a subjective judgement based on the information to hand.