



Home care in Mikkeli city
– Med-O-Wheel Smart as a part of
the medicine dosage services

15.2.2010



Starting point in home care in Mikkelin

- medicine doses were delivered in manual dose cassettes (dosettes)
- dosage was organized by the home care nurses
- two customers in the study managed their medicine themselves



Med-O-Wheel Smart as a part of the dosage services

- As a part of the ERNET project in the Mikkeli Hospital District it was started a pilot project of Addoz's medicine logistics service model and the use of Med-O-Wheel Smarts in home care in Mikkeli city in autumn 2007
- As a result after four months pilot the service model was seen to
 - remarkably increase the safety and the on-time medicine taking
 - free up time for home nursing staff to focus on other caregiving duties
 - help the elderly to live at home for longer
 - yield cost savings
 - lower the level to discharge patients from hospital care or a service home, because they can be provided with a medication dispenser for home use, paid for by the city
 - require a careful, upfront planning of the medicine dosage process in the care organisation
- The result was to continue and even extend the use of Med-O-Wheel Smarts by purchasing more dispensers



A report of the medicine dosage services 15.6.-16.12.2009

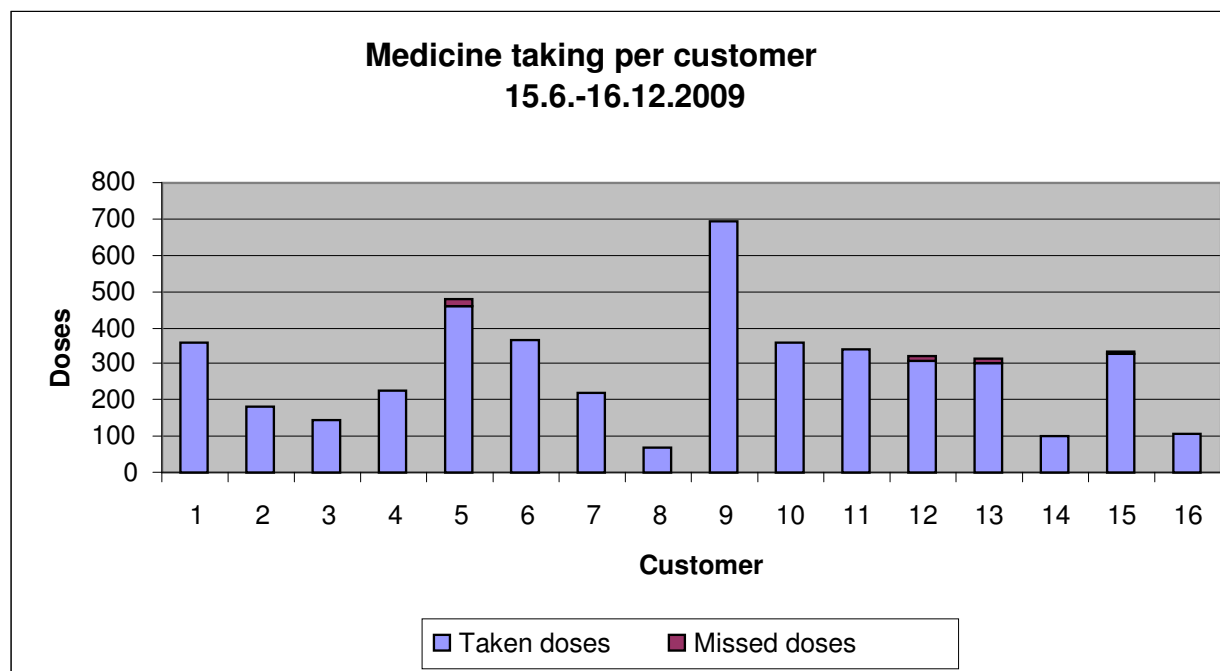
- Report includes 16 customers – the customers having enough information about their medicine taking during the study period
- Amount of doses per day fluctuated between one to four depending on the customer
- Hospital periods and interval treatment periods were excluded from the material. During these periods the use of Med-O-Wheel Smarts was interrupted, because the hospital personnel weren't trained to use the dispensers.
- During the study period the number of doses prepared for these customers was altogether 4628 doses.



Results

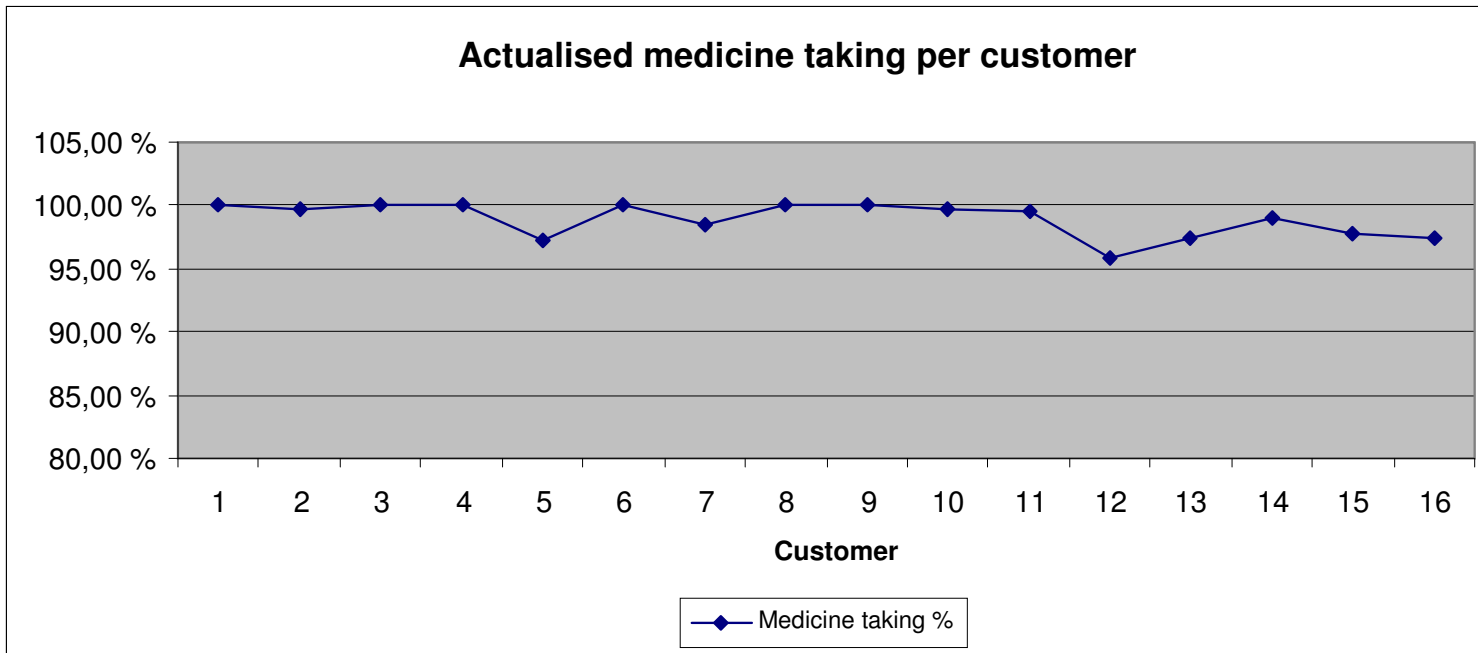
(Total number of doses 4628)

	Doses	% of all doses
Taken doses	4568	98,9%
Missed doses	58	1,1%
Reminder phone calls	291	6,3%
Alert messages	54	1,2%





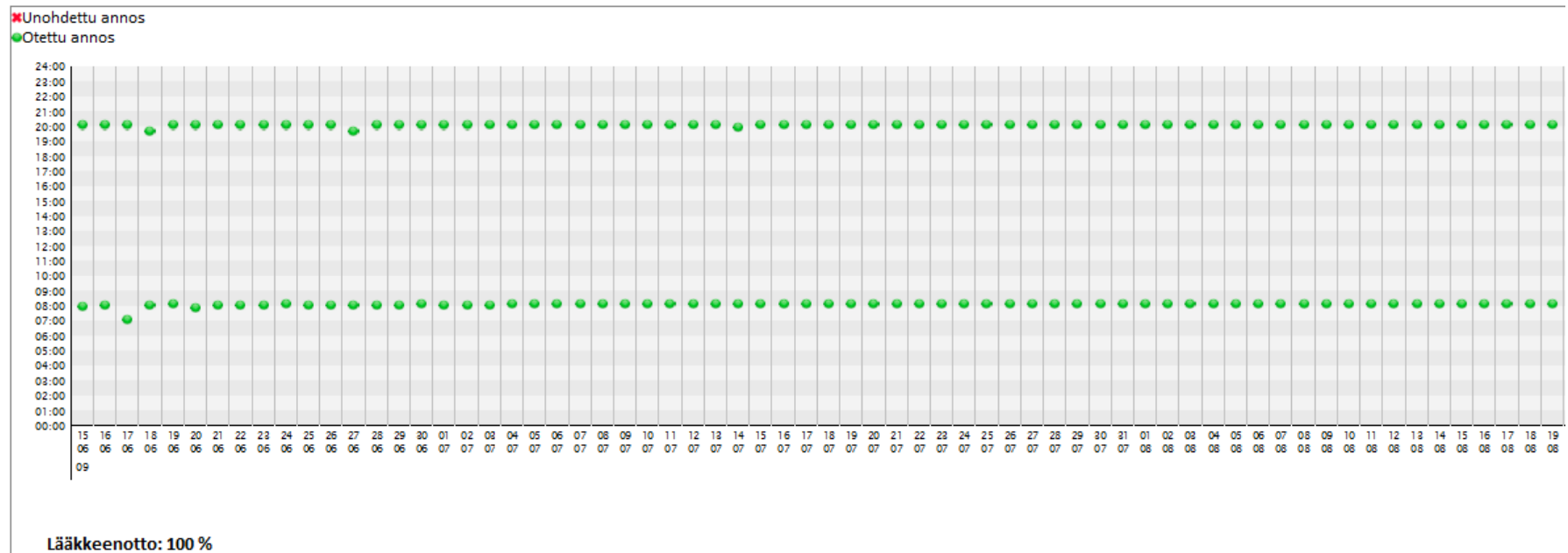
% of medicine taking per customer





Customer 1

- male, 76 years
 - participates in activities, e.g. rehabilitation in the day center
 - home visits were mainly demanded cause of medicine taking
 - earlier the nurse made two home visits per day
- > now one visit per week is demanded for helping in hygiene and medicine dosage





Notes from the social welfare supervisor Paula Lappi 1/2

- It is very important to plan the change and also actualize the new workflow model before taking the Med-O-Wheel Smarts in use.
- The basic requirement for getting the new workflow model in use and for ensuring the functionality is to motivate and train the care personnel.
- Training of new nurses has to be ensured.
- Practising the customers to use Med-O-Wheel Smart takes also from few days to two weeks depending on the condition of the customer and his/her level of interest.
- The carer has to be present and help the customer taking the medicine until the customer feels him/herself comfortable with the dispenser.
- Treatment periods in hospital or rehabilitation center interrupt the use of Med-O-Wheel Smart, because the personnel is not trained to use the dispenser.
- It has to be paid attention to train the care personnel, also the personnel in hospitals. This is to ensure continuous use of Med-O-Wheel Smarts during the periods of acute and short term hospital treatment.
- It is very difficult for the care personnel beforehand know who of the customers benefit and can use Med-O-Wheel Smart and who not. Suitability has to be tested by offering the dispenser for pilot use. For example, there are customers, who were thought to be unable to use the dispenser, but today are managing their own medicine taking successfully.



Notes from the social welfare supervisor Paula Lappi 2/2

- The service model offers remarkable support to the care giver (close relative), who need not to worry about on time medicine taking and security. He/she can concentrate on other care activities, take care of pressing matters or even spend some time with his/her hobbies.
- The customers are motivated to use Med-O-Wheel Smarts, because it brings the feeling of active participation and enables more independent living.
- Home care has been able to decrease the number of home visits and also to focus the visits resulting to longer service time per customer and per visit.
- Medicine taking for Parkinson's disease, demanded every two hours, can be organised by offering two Med-O-Wheel Smarts to the customer.
- By using Med-O-Wheel Smart already before more demanding needs for home care services creates a contact to the customer early enough. This is the way to follow up the customer condition and to change the care services accordingly.
- Male customers might be more willing to take Med-O-Wheel Smart in use. Reasons might be the interest in technology and unwillingness to have other types of care services.
- Med-O-Wheel Smart can also be used in sheltered homes. The customers can be activated for participating his/her treatment, although the nurse is present.



Thank you!

Additional information:

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Dose taking, reminder calls and alert messages - support material

Customer name	Dates MOWS in use	Days MOWS in use	Doses per day	Total number of doses	Taken doses	Missed doses	Taken doses %	Number of reminder calls	Number of alert messages	Notes
Customer 1	15.6.-16.12.	185	2	357	357	0	100,00 %	0	0	customer visits day center, home visits mainly because of medicine taking, 2 visits/day->1 visit/week helping in hygiene and medicine dosage
Customer 2	15.6.-16.12.	185	1	182	181	1	99,73 %	1	1	
Customer 3	25.10.-16.12.	53	3	146	146	0	100,00 %	3	0	a lot of and strong medicines, first unwilling to use MOWS, learnt to use in two days
Customer 4	15.6.-16.12.	115	2	229	229	0	100,00 %	6	0	a lot of medicines, a lot of sicknesses (epilepsy, stroke, Alzheimer's), in poor shape
Customer 5	15.6.-16.12.	163	3	476	458	18	97,23 %	101	13	customer is very happy with MOWS
Customer 6	15.6.-16.12.	185	2	367	367	0	100,00 %	7	0	close relative manages MOWS and receives alerts
Customer 7	17.9.-16.12.	75	3	223	221	2	98,53 %	18	2	
Customer 8	25.9.-31.10.	37	2	71	71	0	100,00 %	0	0	customer wanted to have MOWS, because the spouse also had it
Customer 9	15.6.-16.12.	177	4	695	695	0	100,00 %	14	0	a lot of medicines, first problems with MOWS and the number of medicine, now it works fine
Customer 10	15.6.-16.12.	185	2	358	357	1	99,73 %	2	2	
Customer 11	15.6.-16.12.	185	2	342	340	2	99,46 %	3	1	dosage done during the day center visit, no home care
Customer 12	15.6.-16.12.	164	2	321	308	13	95,84 %	68	5	dosage done during the day center visit, customer very happy with MOWS
Customer 13	15.6.-16.12.	171	2	314	305	9	97,47 %	16	9	
Customer 14	15.6.-16.12.	106	1	103	102	1	99,06 %	8	0	Alzheimer's disease, dosage done during day center visit, close relative receives alerts
Customer 15	15.6.-16.12.	170	2	333	325	8	97,75 %	30	18	
Customer 16	9.11.-16.12.	38	3	109	106	3	97,39 %	14	3	veteran, earlier medicine taking self-acting but mixed, condition of customer significantly improved and customer very pleased with MOWS
Total		2194		4626	4568	58	98,89 %	291	54	
%					98,9 %	1,1 %		6,3 %	1,2 %	