Multidimensional Geriatric Assessment: Back to the Future Effects on Health Care Use and Associated Cost of a Home Visiting Program for Older People With Poor Health Status: A Randomized Clinical Trial in the Netherlands

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Background. Home visiting programs have been developed to improve the functional abilities of older people and subsequently to reduce the use of institutional care services. The results of trials have been inconsistent and their costeffectiveness uncertain. Home visits for a high-risk population rather than the general population seems a promising approach. We therefore studied the effects of a home visiting program for older people with poor health. This article describes the effects on health care use and associated cost.

Methods. We conducted a randomized clinical trial among 330 community-dwelling citizens, aged 70–84 years, in the Netherlands. Participants in the intervention group (n = 160) received eight home visits by a trained home nurse over an 18-month period; a multidimensional geriatric assessment of problems was included. The main outcomes are: admissions to hospital, nursing home, and home for older persons; contacts with medical specialists, general practitioners, and paramedics; and hours of home care help. The data on health care use were mostly obtained from computerized databases of various medical administration offices; the follow-up period was 24 months.

Results. Inpatient and outpatient health care use was similar for both groups, with the exception of a higher distribution of aids and in-home modifications in favor of the intervention group. No differences were found between the intervention and control group in health care cost.

Conclusion. The home visiting program did not appear to have any effect on the health care use of older people with poor health and had a low chance of being cost-effective. We conclude that these visits are probably not beneficial for such persons within the health care setting in the Netherlands or comparable settings in other Western countries.

HOME visiting programs have been developed to improve the health and independent functioning of older people and subsequently to reduce the use of institutional care services. The findings of trials on the effects of home visits have been inconsistent (1–4). There is an ongoing debate whether home visits should be incorporated into regular care for older people. Only a limited number of trials have also addressed cost aspects (5–10). If home visits lead to a reduction in health care use and cost, this is an important argument in favor of continuation of such interventions.

Home visits for a high-risk population seems a promising approach, but the results are mixed; eight controlled studies showed positive effects (6,11–17), six other trials did not (7,18–22). An earlier trial in the Netherlands (n = 580) showed that preventive home visits do not seem to be useful for the general population of older people. However, a post hoc subgroup analysis indicated that the visits seemed to be effective for those with a poor perceived health status (23).

We therefore decided to reinvestigate this finding, focusing entirely on older people with poor health. Details of the design of the current trial, process evaluation of the intervention, and effects on health status have been published elsewhere (24–26). The home visiting program did not show a significant effect on health status—for instance, on the primary outcomes self-rated health, functional status, or quality of life. Nevertheless, it is possible that the program might have generated sufficient cost offsets in reduced health expenditures that could yield significant health savings overall. This article describes the effects on health care use and associated cost. Additionally, a cost-effectiveness analysis was performed from a societal perspective.

METHODS

Participants

Eligibility of participants was determined through a postal questionnaire, which was mailed in November 2002 to 4901 people (70–84 years) living at home in a town in the south of the Netherlands (Sittard and surrounding areas). We excluded persons who valued their health status as moderate to good (self-rated health [SRH] _6, scale 1–10); who already received home nursing care on a regular basis; or who were on a waiting list for admission to a nursing home or home for older persons. After the screening procedure, we randomly allocated 160 persons to the intervention and 170 to the control group. The sample size was calculated from data of a previous home visiting study in the Netherlands on the primary health-related measure SRH (6,24), which represents an overall measure for functional health abilities, including physical, mental, and social functioning (23,27). Based on a 0.9 power to detect a difference (at the two-sided 5% level) of 20% or more between the study groups on SRH, with an assumed loss to follow-up of 30%, 150 participants were required in each group.

Intervention

The program consisted of eight home visits, with telephone follow-up, over an 18-month period (February 2003 to October 2004). Participants in the intervention group were visited approximately every 2 months. Three trained home nurses (auxiliary community nurses) carried out the visits under supervision of a public health nurse (community nurse). Key elements of the (systematic) visits included a multidimensional geriatric assessment of problems and risks, advice, and referral to professional and community services (24). The control group received usual care; participants could use or apply for all available care.

Health Care Use and Cost

Health care use relates to all professional health services and goods consumed during the intervention period and 6-month follow-up. These services include number of admissions and length of stay at the hospital, nursing home, and home for older persons; number of contacts with medical specialists, general practitioners (GPs), and paramedics; and hours of home care help. Goods consumed include medication, aids, and in-home modifications. Data on hospital admissions and contacts with medical specialists and GPs were also available for a 6-month period before the start of the intervention (baseline values). The volumes of the health care items were mostly obtained from computerized databases of various medical administration offices (see Table 1). The municipality supplied mortality data.

Almost all cost prices were obtained from Dutch guidelines; the baseline year was 2003, or otherwise discounted at 4% (28,29). For medication and aids we used the cost supplied by the health insurance companies. The cost of inhome modifications was based on average prices per item.

Health care costs are inpatient days spent at the hospital, nursing home, and home for older persons (and day treatments in the hospital); outpatient visits to health care providers; professional home care; medication; aids; and inhome modifications. The cost of the intervention program is presented separately from the other health care costs and includes the nurses' salaries, their travel costs, and the costs for their training activities.

Cost-Effectiveness Analysis

For the cost-effectiveness analysis we calculated the incremental cost and effectiveness of the home visiting program compared with usual care. Incremental costs are defined as the mean difference between both groups in total cost over 24 months; incremental effectiveness is the mean difference in SRH at 24 months, adjusted for baseline values (26). The value of production lost to society due to illnessrelated absence from work was not assessed, because this is of no relevance in the targeted population.

Statistical Analyses

The analyses were conducted according to the intentionto- treat principle. For hospital admissions, contacts with medical specialists, GPs, and paramedics, and hours of home care, we assessed differences between the intervention and control group, applying a generalized linear model for generalized estimating equations. This model allowed for analysis of repeated measurements (consumption at halfyearly periods) and negative binomial distributions for count data (due to skewed distributions). The remaining variables were analyzed either by a Cox regression analysis or a general linear model for negative binomial distributions.

All analyses (SPSS version 15.0; SPSS, Chicago, IL) were adjusted for possible differences in baseline values, if available, and baseline characteristics. Two-sided significance tests were used. Mean and standard deviations (*SD*), incidence-rate and hazard ratios (including 95% confidence intervals [CI]), and *p* values are presented.

To examine the uncertainty surrounding sample selection for both cost and effects, we conducted bootstrap simulations (30). Finally, we performed sensitivity analyses.

RESULTS

Participants

In total, 330 people participated, 160 in the intervention and 170 in the control group. The mean age of the participants was 76 years (*SD* = 3.7), with 40% men and 60% women. Baseline characteristics were comparable for both groups (24). Mortality showed no substantial differences between the groups after 24 months: 29 participants (18%) died in the intervention and 23 (14%) in the control group. Seventy-eight percent of participants in the intervention group (124/160) received all eight visits and another 17% (27/160) on average four. The reasons for receiving only some of the visits were mortality, selfwithdrawal, or illness (25).

Health Care Use and Cost

Data on health care use were available for nearly all participants, including those who died during the 2-year study period. Data for 11/330 participants (3%) could not be obtained from the health insurance companies; and for 9/330 participants (3%) from the GP offices (see also footnote to Table 1).

Tables 2 and 3 summarize, respectively, the participants' inpatient and outpatient health care use. Baseline values are also presented, if available.

[TABLE 1]

A higher percentage of participants in the intervention group were admitted to the hospital, but the mean length of stay was slightly shorter. About half of the participants who were admitted to the hospital over 24 months were admitted once (40/80 and 34/71 for the intervention and control groups, respectively), about 30% twice (25/80 and 21/71), and the remaining 20% 3 times or more (15/80 and 16/71) (data not shown). Overall, no statistically significant differences were found between the two groups for inpatient health care use.

The proportion of participants consulting different medical specialists at the outpatient department (18 specialties recorded in total) was similar in both groups, for example, 40% of the participants contacted an

ophthalmologist (63/160 and 71/170 for intervention and control groups, respectively), 25% a cardiologist (42 and 40), and about 25% a neurologist (42 and 41). Few participants consulted a geriatrician (6/160 and 15/170) (data not shown). The mean number of consultations and visits from the GP was slightly higher in the intervention group compared to the control group, whereas the mean number of telephone contacts was lower (Table 3). Approximately the same percentage of persons in both groups was having professional home care; the mean number of hours was somewhat higher in the intervention group. Nearly everybody used medication, which we classified according to the Anatomical Therapeutic Chemical Classification System (31); for example, 76% in the intervention and 67% in the control group used drugs for the cardiovascular system and over half for the nervous system (55% and 57%, respectively).

Hardly any differences were found between the groups in any of the drug classes, in either percentage of users or mean numbers per drug class (data not shown).

None of the results on noninstitutional care demonstrated statistically significant differences between the groups.

More aids were acquired during the intervention period by participants in the intervention group compared to the control group (incidence-rate ratio 1.6, 95% CI, 1.2–2.0); for example, for mobility (rollators, 25% vs 18%; scootmobiles, 13% vs 8%), for reading (9% vs 4%), and for getting dressed (5% vs 1%) (data not shown). In-home modifications were also acquired more often by participants in the intervention group compared to the control group (incidence-rate ratio 1.5, 95% CI, 1.2–1.9), ranging from a heightened toilet seat (21% vs 16%), grips for toilets (18% vs 11%) and for showers (30% vs 14%), to alarm systems (5% vs 2%) (data not shown).

In Table 4 the use of health care resources was valued in monetary units. The use of more aids and in-home modifications by the intervention group was not reflected by higher cost; the cost for aids was even lower. The cost of in-home modifications was calculated per item (11 items), and although the number was higher in the intervention group, the cost was counterbalanced by a higher number of expensive items in the control group (e.g., chair lift, 5% vs 4%, and central heating, 3% vs 1%) (data not shown). The overall total cost per person, including the cost for the home visiting program, is *e*450 higher in the intervention group than in the control group. The overall differences are not statistically significant. The sensitivity analyses did not change the results (details on request).

[TABLE 2]

Cost-Effectiveness

For 37/330 participants only the baseline measurement of the primary outcomes was available; they were omitted from the analyses. In total there were four measurements (questionnaires): at baseline, 12, 18, and 24 months. Values were substituted on an individual basis from the nearest available value in the intervention period, if persons had one or two missing questionnaires (due to mortality, selfwithdrawal, or illness) (26). Data on the effect measure SRH was therefore available for 293 participants, 139 in the intervention (87%) and 154 in the control group (91%). For those we calculated the total mean cost. This resulted in an incremental cost of *e*1525 (95% CI, _*e*2251 to *e*5299), or higher cost for the intervention group (data not shown). The mean difference in SRH between both groups at 24 months (*n*=293) was –0.02 points (95% CI, –0.38 to 0.33, *p*=.90) (26). There appeared to be no difference in total cost and in scores on SRH between the intervention and the control groups. Bootstrap analysis confirmed these results and showed furthermore that there was only a 10% chance that the program was cost effective (details on request).

[TABLE3]

DISCUSSION

Overall, we could not show a positive effect of the home visiting program carried out by home nurses on the health care use of older people with poor health. The results of the economic evaluation showed furthermore that the program had no effect on cost and had a low chance of being costeffective.

The home visiting program was performed nevertheless under near ideal circumstances (25,26). The health care data that we collected were mostly from official registries and had a high degree of

completeness. It is unlikely that the small differences in mortality influenced the results. Because there were no health effects, it is unlikely that cost past 24 months would be greatly reduced by the intervention.

The most important elements of the visits were to detect problems and risks, to give advice, and to refer to other professional or community services. A continuous yield of health problems came forward, and to deal with these problems many referrals were made to various care providers (25). Before the start of the program we expected an increase in outpatient health care use and subsequently a decrease in institutional care. On the basis of the referrals, on average four referrals per person during the intervention period (*n* = 144, 650 referrals), an increase was to be expected in GP contacts (39% of referrals), aids and inhome modifications (15%), and home care (13%). The compliance rate was also highest for those referrals (between 69% and 82%). Referrals to medical specialists accounted for 8% of the referrals (compliance 65%) and to physical therapists 4% (compliance 52%) (25). We did find an increase, although not statistically significant, in GP contacts in the intervention group compared with the control group and a higher number of hours in home care. More aids were acquired by the intervention group, and in-home modifications were done more frequently. It was not surprising, due to the lower number of referrals and lower compliance, that hardly any differences were found between the groups in the number of medical specialist and physical therapist contacts.

The small increases in outpatient health care use for the intervention group did not, however, have any impact on the use of institutional health care.

Several other factors may have affected the effectiveness of the program on health care use and cost. First, the nurses were not part of a multidisciplinary team. We opted for a community care setting, in which resources such as consultations with geriatricians and physicians are not readily available, to carry out the visits. This limited, however, the medical component of the geriatric assessment and may have resulted in fewer and different referrals to various care providers. Second, other program characteristics, including for example more frequent visits (3) or a more systematically planned coordination of care (32), might have added to the minor effects on health care use.

Third, many participants used the health care system; around 90% contacted their GP and/or a medical specialist, and between 30% and 40% received home care. Although there were some shifts in health care use patterns, it cannot be ruled out that, in general, usual care is sufficient in this health care setting. Fourth, the study sample size calculations (as in most cost-effectiveness studies) were based on effectiveness and not on service use or cost measures, which have much higher coefficients of variation than SRH, and so generally require larger sample sizes. Fifth, we did not include the cost of informal care, which could have been of relevance for the targeted population, for example, paid and unpaid help from family and friends. Sixth, for aids and inhome modifications it is recommended to use data from care providers rather than self-reported data, because they underestimate volumes and cost less (33). Cost of in-home modifications in this study might have been underestimated.

The cost for aids, as supplied by the health insurance companies, was however lower than we expected for the intervention group (based on our collected 12 items).

The results of the current study on health care use are compatible with those found by Stuck and colleagues (7) and Dalby and colleagues (18). Both trials also did not find effects on hospital or ambulatory care use among persons at risk of functional deterioration. The cost-effectiveness findings in this study are in agreement with those of Kronborg and colleagues (10), who also included an economic evaluation in their study on the effectiveness of home visits for older people. Their study also showed no significant differences in total cost or effectiveness. It is however difficult to compare our study with the one by Kronborg and colleagues because they targeted the general population of home-dwelling citizens, focusing mainly on nondisabled persons to prevent functional decline, and their visiting program consisted of, on average, 1.5 visits per participating person during the 3-year program. From other trials addressing cost aspects, it still remains uncertain whether home visits are cost-effective (5–9).

Beforehand we expected that the home visits would improve the health status of the participants and reduce institutional care. The current study could not, however, demonstrate this. We did not find effects of the home visits on health status or on health care use and associated cost.

The additional aids and in-home modifications might have made life more comfortable in the intervention group, but this did not affect their health status. In conclusion, we think that the home visiting program including multidimensional geriatric assessment with advice and referral to professional and community

services is probably not beneficial for older people with poor health within the health care setting in the Netherlands or comparable settings in other Western countries.

The post hoc subgroup comparison from an earlier Dutch study that indicated the visits to be effective for those with a poor perceived health status at baseline could not be confirmed by the results from this larger study. Post hoc subgroup analyses should be interpreted with caution.

Further research is necessary to determine which strategies are most beneficial, including for instance the effectiveness of more intensive programs.

[TABLE 4]

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A.B. was responsible for coordinating the trial, analyzing the data, and drafting the manuscript. E.v.R. obtained funding and designed, initiated, and supervised the study. S.E. helped with the economic evaluation, and T.A. helped with the statistical analysis. G.K. supervised the study. P.K.
obtained funding and designed, initiated, and supervised the study. All authors were responsible for the intellectual content of the paper and saw and approved the final version of the manuscript.

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TABLES

Table 1. Health Care Items

Category	Volume	Cost* (€)	Source of Data†
Health care: inpatients			
Hospital	Admission	—	Local hospital
	Day	337.00	Health insurance organization‡
Day treatment	Day	229.00	Local hospital
Nursing home	Admission	—	Office for public financed care
	Day	206.00	
Home for older persons	Admission	—	Office for public financed care
	Day	85.00	
Health care: outpatients			
Medical specialist	Consultation	56.00	Local hospital; Individual interviews‡
GP	Consultation	20.20	GP office
	Home visit	40.40	
	Telephone	10.10	
Paramedical therapy§	Consultation	22.75	Local hospital; Health insurance organization
Practical assistance at home	Hour	21.70	Office for public financed care; local home care organization‖
Personal care at home	Hour	34.10	Office for public financed care; local home care organization‖
Community nurse visits	Hour	58.90	Office for public financed care; local home care organization‖
Medication (prescription drug)	—	Per drug#	Health insurance organization; individual interviews
	Number¶	—	
Aids	—	Total**	Health insurance organization; individual interviews
	Number¶	—	
In-home modifications	Number¶	Per item	Individual interviews

Notes: *Prices (2003 €) from the Dutch manual for cost-analysis in healthcare research (28), unless otherwise stated.

†Continuous registration over 24 months; data from individual interviews at 18 months, as reported. Missing data: general practitioner (GP) offices ($n = 9$; intervention $n = 3$, control group $n = 6$); health insurances ($n = 11$; intervention $n = 7$, control group $n = 4$); individual interviews ($n = 67$; intervention $n = 32$, control group $n = 35$), due to mortality ($n = 34$), self-withdrawal ($n = 19$), and illness ($n = 14$).

‡Complementary data for nonlocal hospital admissions (20/291, 7%) and specialist consultations (321/2816, 11%).

§Mainly physiotherapy.

‖Complementary data for 2003; 41/330 participants (12%) were not registered at the local organization, of these 41, 14 received home care according to self-reported data at baseline and these data could not be obtained.

¶Number of prescriptions at 18 months/number of acquired aids and modifications over 18 months (pre-structured format of 12 and 11 items, respectively); data from individual interviews.

#Cost per drug includes the pharmacist fee (€ 6.45); data from health insurances.

**Total cost: data from health insurances.

Table 2. Inpatient Health Care Use After 18 (End of Intervention) and 24 Months (End of Follow-up)

		Intervention Group ($N = 160$)				Control Group ($N = 170$)						
Variable	Time (Months)	Participants *N* (%)	Mean	*SD*	Range*	Participants *N* (%)	Mean	*SD*	Range*	Ratio†	(95% CI)	*p* Value
Hospital												
Admissions[1]	−6 to 0	18 (11)	0.17	0.62	6	23 (14)	0.16	0.43	2			
	0 to 18	68 (43)	0.80	1.22	7	61 (36)	0.64	1.10	7	1.19	(0.89–1.59)	.23
	0 to 24	80 (50)	0.97	1.38	8	71 (42)	0.80	1.23	7	1.17	(0.88–1.56)	.27
Bed days[2]	−6 to 0	18 (11)	1.55	7.2	63	23 (14)	0.9	3.12	26			
	0 to 18	68 (43)	5.92	11.63	84	61 (36)	6.51	15.48	109	0.88	(0.64–1.19)	.40
	0 to 24	80 (50)	8.14	18.14	159	71 (42)	8.54	17.99	109	0.92	(0.70–1.21)	.57
Day	−6 to 0	9 (6)	0.13	0.71	7	11 (7)	0.11	0.67	8			
Treatment[1]	0 to 18	22 (14)	0.36	1.46	12	26 (15)	0.36	1.55	16	0.97	(0.71–1.32)	.83
	0 to 24	27 (17)	0.40	1.47	12	32 (19)	0.45	1.64	16	0.90	(0.64–1.25)	.52
Nursing home												
Admissions[3]	0 to 24	10 (6)	0.08	0.31	2	11 (7)	0.08	0.31	2	1.00	(0.94–1.06)	.96
Days[2]	0 to 24	10 (6)	13.70	69.98	623	11 (7)	13.71	70.62	596	1.02	(0.42–2.48)	.96
Home for older persons												
Admissions[3]	0 to 24	5 (3)	0.04	0.22	2	6 (4)	0.05	0.26	2	0.99	(0.95–1.04)	.68
Days[2]	0 to 24	5 (3)	3.38	29.48	355	6 (4)	7.13	52.27	539	0.47	(0.12–1.79)	.27

Notes: Statistical analyses: [1]Generalized linear model, generalized estimating equations, negative binomial distribution; [2]Cox regression; [3]Generalized linear model, negative binomial distribution.

*The minimum value is always 0.

†Indicates for [1] and [3] the incidence-rate ratio: the expected numbers in the intervention group compared to those in the control group; for [2] the length of stay at institutions, the hazard ratio is shown; ratio > 1 means the odds are increased, ratio < 1 the odds are decreased. Ratios are adjusted for possible differences in baseline values, if available, and baseline characteristics (age, gender, education, living situation, and mastery).

SD = standard deviation; CI = confidence interval.

Table 3. Outpatient Health Care Use After 18 (End of Intervention) and 24 Months (End of Follow-Up)

		Intervention Group ($N = 160$)				Control Group ($N = 170$)						
Variable	Time (Months)	Participants *N* (%)	Mean	*SD*	Range*	Participants *N* (%)	Mean	*SD*	Range*	Ratio†	(95% CI)	*p* Value
Medical specialist												
Consultations[1]	−6 to 0	96 (60)	1.89	2.50	12	111 (65)	2.21	2.55	16			
	0 to 18	141 (88)	6.72	7.15	54	146 (86)	6.97	6.37	29	1.00	(0.83–1.21)	.99
	0 to 24	142 (89)	8.32	8.56	66	149 (88)	8.73	7.69	36	1.00	(0.94–1.05)	.87
General practitioner												
Consultations[1]	−6 to 0	117 (75)	2.59	2.81	17	131 (80)	2.74	2.57	13			
	0 to 18	146 (93)	7.52	6.31	38	146 (89)	7.02	6.70	44	1.02	(0.98–1.06)	.48
	0 to 24	146 (93)	9.31	7.96	46	148 (90)	8.88	8.18	55	1.01	(0.97–1.06)	.63
Visits[1]	−6 to 0	38 (24)	0.62	1.69	14	42 (26)	0.70	2.02	17			
	0 to 18	90 (57)	3.70	6.73	41	85 (52)	2.78	5.91	39	1.08	(0.93–1.25)	.30
	0 to 24	99 (63)	4.72	7.90	41	93 (57)	3.75	7.80	51	1.08	(0.93–1.24)	.31
Telephone Consultations[1]	−6 to 0	24 (15)	0.19	0.57	4	35 (21)	0.27	0.74	5			
	0 to 18	57 (36)	0.81	1.65	12	85 (52)	1.09	1.65	9	0.81	(0.60–1.08)	.15
	0 to 24	71 (45)	1.15	2.12	15	93 (57)	1.49	2.17	10	0.81	(0.62–1.06)	.12
Paramedics Consultations[1]	0 to 18	80 (53)	11.96	23.63	141	99 (60)	11.84	19.84	88	1.00	(0.94–1.08)	.82
	0 to 24	89 (59)	15.75	30.18	190	108 (65)	15.38	24.37	100	1.00	(0.94–1.08)	.92
Home care												
Home help[1]	0 to 18	60 (38)	62.01	105.62	468	63 (37)	56.02	98.00	408	1.00	(0.99–1.01)	.45
	0 to 24	61 (38)	86.65	143.99	627	69 (41)	81.79	138.47	534	0.98	(0.98–1.02)	.54
Personal care[1]	0 to 18	40 (25)	30.89	98.68	831	44 (26)	24.11	81.20	828	1.02	(0.91–1.14)	.76
	0 to 24	45 (28)	42.06	124.25	907	50 (29)	34.09	109.12	1130	1.01	(0.91–1.13)	.79
Other nurse visits[‡,1]	0 to 18	46 (29)	10.87	46.65	474	37 (22)	7.8	32.06	330	1.04	(0.91–1.20)	.56
	0 to 24	55 (34)	16.83	77.95	894	45 (27)	13.90	65.19	750	1.03	(0.91–1.17)	.64
		Intervention Group (N = 128)				Control Group (N = 135)						
Medication[§,2]	18	122 (98)	5.9	3.08	15	129 (99)	5.9	2.95	14	0.95	(0.73–1.22)	.67
Aids[‖,2]	0 to 18	77 (60)	1.2	1.36	8	60 (44)	0.7	0.98	5	1.61	(1.25–2.06)	.00
Modifications[‖,2]	0 to 18	61 (48)	1.2	1.61	8	44 (33)	0.80	1.56	8	1.51	(1.17–1.94)	.00

Notes: Statistical analyses: [1]Generalized linear model, generalized estimating equations, negative binomial distributions; [2]Generalized linear model, negative binomial distributions.

*The minimum value is always 0.

†The incidence-rate ratio indicates the expected numbers in the intervention group compared to those in the control group; ratio > 1 means the odds are increased, ratio < 1 the odds are decreased. Ratios are adjusted for possible differences in baseline values, if available, and baseline characteristics (age, gender, education, living situation, and mastery).

‡Nurse visits from the home visiting program are not included.

§The number of prescriptions at 18 months.

‖The number acquired during the intervention period.

SD = standard deviation; CI = confidence interval.