CME

Home assessment and care

Catherine Ferrier, MD, CCFP Paul Lysy, MD, CCFP, FCFP

abstract

OBJECTIVE To describe the scope of home care and to give practical advice for incorporating home visits into family practice.

QUALITY OF EVIDENCE Most of the literature is based on expert opinion, but there are some randomized trials and well done surveys.

MAIN MESSAGE Although physicians make fewer housecalls than they used to, home visiting is essential to providing good care to certain patients. An approach to evaluating patients and their home environments is presented. Management plans should be formulated in collaboration with home care teams. We offer practical advice for incorporating home visits into practice.

CONCLUSION Home visits can be a valuable and rewarding complement to family practice and are essential for the development of home care.

résumé

OBJECTIF Décrire la portée des soins à domicile et offrir des conseils utiles pour intégrer les visites à domicile à la pratique familiale.

QUALITÉ DES DONNÉES La majorité des ouvrages se fondent sur l'opinion d'experts, mais il existe quelques essais aléatoires et des enquêtes bien conçues.

PRINCIPAL MESSAGE Même si les médecins font moins de visites à domicile qu'auparavant, ces dernières se révèlent essentielles pour dispenser de bons soins à certains patients. On présente une approche pour évaluer les patients et leur environnement à la maison. Les plans thérapeutiques devraient être définis en collaboration avec les équipes de soins à domicile. Nous offrons des conseils pratiques pour intégrer les visites à domicile à la pratique médicale.

CONCLUSION Les visites à domicile peuvent se révéler précieuses et constituer un complément satisfaisant à la pratique familiale. Elles sont essentielles au développement des soins à domicile.

This article has been peer reviewed.
Cet article a fait l'objet d'une évaluation externe.
Can Fam Physician 2000;46:2053-2058.

Home visits by physicians, once the mainstay of medical care, have declined dramatically in the last 50 years.[1] Most visits still made these days are by family doctors.[2,3] Recent budget cutbacks in the health sector, requiring hospitals to shorten stays, were accompanied by promises of increased funding for home care (ie, nursing, rehabilitation, homemaking, and other services provided in the home as an alternative to prolonged hospitalization or placement in an institution).

Home care is carried out by multidisciplinary teams that might or might not include physicians. Services are currently inadequate and unpredictable; they vary greatly from province to province and even within provinces.[4,5] Many family physicians will need to reconsider their position on home visits in the interest of providing adequate care. They could choose to become members of home care teams or practise in collaboration with teams caring for their patients.

There are several different types of home care patients. Those discharged early after acute illnesses or after surgery require home-based, subacute, rehabilitation or convalescent care. Elderly or disabled patients who choose to stay home need routine follow up and occasional acute medical care. Home might be the best place for palliative care for some patients.[6,7] Each type of patient requires a different intensity of involvement on the part of his or her physician. Even for patients who normally come to the office, physicians can gain useful information on their home and family situations from a single home visit.

American data[8] for patients receiving home health care indicate that about 70% are 65 years old or older, 66% are chronically ill, and 14% are terminally ill. About 30% of patients suffer from dementia or incontinence. Even if these figures do not exactly reflect the situation in Canada, they give an indication of which areas of competence are required for home management of patients.

In this article, we present a rationale for home visiting by family physicians. We also offer guidelines for taking full advantage of home visits, for collaborating effectively with home care teams, and for fitting home visiting into a busy practice.

Quality of evidence

MEDLINE was searched from 1991 to the end of 1999, using the key words "house calls" and "home care services." Additional information was sought in "A Home Care Annotated Bibliography,"[9] published in the *Journal of the American Geriatrics Society* in 1998, and the reference lists of pertinent articles.

There are deficiencies at almost all levels of research into home care and physician home visiting. Most of the literature is based on expert opinion and clinical experience (level 3 evidence). There are well done surveys of physicians' home visiting practices (level 3 evidence) and some good randomized trials of the effectiveness of various interventions and programs (level 1 evidence). We chose good quality studies, where available, and articles based on clinical experience for areas that have not been studied adequately.

Why do home visits?

The practical questions, "Should I do home visits?" and "Are they effective?" are not easily answered in the literature. Studies vary on type of home visit, professional doing the visit, and outcome being measured.

Community-based long-term care programs have been studied most extensively and, for the most part, have not been found cost-effective. Weissert and Hedrick[10] propose targeting patients and controlling costs aggressively to improve these statistics, but then conclude that the main reason patients like home care in the United States is not the economics but rather patient preference and life satisfaction. Single or periodic home visits permit health care professionals to recognize more problems (eg, "psychobehavioural" problems, safety issues, nutrition, medication compliance, caregiver stress) than they would with just clinic visits.[11] Periodic preventive visits by public health nurses do not affect mortality or various health and functional measures in the general population, but they do in patients in poor health.[12]

Literature is lacking on the effectiveness of home visits by family physicians. A very good reason for this might be that the alternative for many patients is, simply, no medical care. A Canadian study[13] found that almost one third of homebound elderly people had never had primary care physicians, and another third had physicians who refused to make home visits. In the United States, more elderly patients have had cardiac catheterization than have had home visits from physicians.[14] These patients might be completely homebound for a period after discharge from hospital or homebound due to age or permanent disability. They might be weakened by terminal illness, demented, depressed, or paranoid.[15] Architectural barriers, such as stairs, are a consideration, as is the availability

Dr Ferrier *is a Lecturer and* **Dr Lysy** *an Assistant Professor in the Department of Family Medicine at McGill University in Montreal, Que.*

of family or friends to bring these patients to the office. Without primary care physicians, they often use home remedies, home care nurses, or emergency rooms to deal with their problems, but they do not receive adequate medical care.

We do home visits to provide basic health care to patients who are physically or mentally frail and who have remained at home for personal reasons or because of public policy. Home visits also permit more complete assessment of frail patients and, we hope, allow us to prevent unnecessary deterioration.

Making the most of home visits

It is not a physician's role to carry out a complete evaluation of a home situation. That is usually done by one or more members of a home care team. Elements of a complete home assessment are listed in **Table 1**[16]. Nevertheless, it is well worth a physician's time to take a few extra minutes to gather information available only at home.[17,18] Here are some issues to keep in mind.

Mobility and activities of daily living. A quick look at the condition of the house will tell you how a patient is managing with activities of daily living. Is it clean? Do the kitchen and bathroom look used? This information can help you make recommendations for appropriate home care services. Is there an odour or other evidence of incontinence?

Can a patient move about the house safely, get in and out of bed, and on and off chairs and the toilet? Adaptations might be required. What about a patient's footwear? Woolen slippers on a hardwood floor or backless slippers on any flooring can be deadly.

Social supports. With whom does a patient live? If alone, who is available to help with daily living activities or to summon in case of emergency? Is outside help required (public or private)? Is the burden of care excessive? How is the caregiver coping? Is there evidence of abuse or neglect?

Nutrition. With a patient's permission, a quick look into the refrigerator and kitchen cupboards will tell you what you need to know about diet. If measured mental status and functional level are at variance, look hard for hidden alcohol bottles.

Medications. A home visit might be the only way to find out how many medications a patient has. Look around for medications that might not have been mentioned: in the kitchen, the bedroom, the medicine cabinet. Are there prescriptions from several doctors? Is a patient taking pills you had recommended stopping, other people's pills, or over-the-counter preparations? Look at the labels on bottles to see whether patients are taking the required medications as prescribed. Does a patient need a pill box to facilitate compliance? Pill boxes can be filled weekly by most pharmacies or by home care nurses.

Home environment. A home can present many hazards to frail elderly people. Glance at the neighbourhood and at access to the building. Look at the lighting, keeping in mind that your patient might have limited vision. Clutter, scatter rugs, and long telephone cords are worth noting. If a patient smokes, are there enough ashtrays and are they being used? Do you see any burn marks? Are stairs safe? Do they have hand rails? Is the bathroom easily accessible, or should the patient have a commode? Are kitchen items within reach? Is there evidence that a patient is not using the stove safely?

Physical examinations. Physical examinations are done essentially the same way at home as in an office. You might have to examine from the wrong side or kneeling on the floor if the bed is low. You can

Table 1. **Elements of a home assessment**[16]

FUNCTIONAL ASSESSMENT
Activities of daily living
Instrumental activities of daily living
Sensory state
OTHER ASSESSMENTS
Mental and cognitive state
Psychosocial condition
Nutritional needs
Medication use and compliance
Caregiver situation
Home environment
The community
Finances

do a pelvic examination, but a speculum examination is nearly impossible. If a patient is bedridden or incontinent, remember to examine the skin carefully.

Developing home care plans and working with home care teams

In addition to patients' willingness, caring for patients at home requires the cooperative effort of several people. In many cases, these are one or several informal caregivers (family, friends). In other cases, they might be part of a formal (paid or professional) team. Often both are involved.

Multidisciplinary teams. Physicians familiar with multidisciplinary teams in institutions should note that there is much more overlap in the roles of members of home care teams than when all disciplines are readily available inside an institution.[16] Home care nurses often observe physical signs over and above vital signs. Family members or home aid workers might be involved in reinforcing teaching of proper transfer techniques. Social workers note and report acute deterioration in patients' clinical states.

Although a physician's role on a home care team could be a minor one,[19] it is important that he or she be aware of the roles, both in assessment of patients and in provision and management of care, of members of the formal care team: social worker, nurse, physiotherapist, occupational therapist, nutritionist, speech pathologist, pharmacist, medical or surgical specialist, homemaker, personal aid worker, and so on. Many regions have organized, publicly funded, home care service teams that include physicians working on sessional fees. In some cases, teams are organized to deal with specific situations or medical conditions, such as palliative care or chronic lung disease.

Some institutions that primarily provide inpatient or outpatient services are organized to also provide services, such as geriatric assessment or rehabilitation, to homebound patients. Where services are poorly organized, physicians armed with experience and local knowledge can assist patients and their families to decide which services and providers are most appropriate. Private comprehensive service organizations are now available (they have been long established in the United States where funding can be either public or private) and are another form of ready-made teams that families or physicians can turn to.

Communication. Communication is essential when working in or with a team. Unfortunately, it is discouraged by the fee-for-service payment system where it is not remunerated.[20] One opportunity for communication is at the initial meeting for working out a plan for a patient's care or at the time of discharge from hospital. Another opportunity for direct communication is during home visits (which are remunerated) that can be scheduled to coincide with visits by other key care providers.

Plan of care. Following assessment, a plan of care is formulated. The plan consists of interventions aimed at achieving a variety of goals, among which hygiene, proper nutrition, safe environment, support of natural caregivers, functional improvement, and medication and disease management are included. For stable patients with no functional deficits, except the inability to leave home, it might be as simple as providing routine medical care at home rather than in a clinic. Patients and informal caregivers take care of the rest. For patients with multiple deficits or recovering from complicated acute illnesses, particularly when availability of informal care is limited, the plan is ideally developed in the course of an interdisciplinary meeting. Details of the interventions expected of each team member and the frequency and anticipated duration of their involvement should be made clear.

In most cases, a physician's primary role will be to manage disease and medications. While a few patients will be receiving intravenous medication, most will need only simplified drug regimens and a system in place for feedback on tolerance and compliance. For less stable patients, such as those recently discharged from hospital, it is important to provide formal and explicit written orders for home care with specific guidelines for conditions (clinical parameters, functional deterioration, adverse reactions) that require contacting the physician.[19] Families of palliative care patients are sometimes reluctant or afraid to use powerful drugs unless criteria for their use and exact dosages are written out.

Staying at home or not. Not every patient can be maintained at home indefinitely; treatment plans should establish criteria for deciding when to curtail or discontinue home care. Decisions are based on benefit to patients versus risk and availability of resources (immediate or medium-term risks, such as wandering out of the house, falling, not eating, and setting fire to or flooding dwelling, are weighed against the benefits of staying in a natural and familiar environment). If risks cannot be diminished at home (ie, by disconnecting the stove or by providing increased supervision or assistance at meals) patients should be moved to safer environments.

Competent patients or proxy decision makers sometimes decide on staying in the home despite clear risks. A difficult ethical issue arises in cases where such decisions result in a continuing or increased need for services. This difficulty is highlighted by a study of physicians involved in home care in Quebec. The study showed through hypothetical cases that physicians made management decisions consistent with their moral framework except in the area of discontinuing or limiting services (eg, they would not have curtailed services simply because patients refused to move to safer environments despite their own sense that services should be limited).[21] Difficult as these situations often are, physicians are the only ones who can exercise both clinical and ethical judgment simultaneously to assist in resolving the problem. Other grounds for moving patients out of the home are that a caregiver's health is jeopardized by the burden of care.

The resource allocation limit for home care might be fixed by policy. For example, in Quebec, the maximum amount of care provided by the public home care agency is 5 hours daily per patient. This amount can be provided to only a few patients.

Making home care part of practice

Inefficiency. "Lack of efficiency" is a frequent reason for not doing home visits.[22] As Burton points out, inefficiency does not prevent physicians from tracking down laboratory results, teaching medical students, or attending conferences (ie, efficiency in providing care cannot be an end in itself). The lack of financial incentives to home care is also beginning to be recognized. Substantial fee supplements for care of patients at home are now in place for palliative care (Ontario) and for those with "severe loss of autonomy" (Quebec).

Some of the inefficiencies inherent in visiting patients at home can be overcome by clustering[23] housecalls both geographically and temporally (eg, the same half-day each week). Because most patients seen at home have chronic and more or less stable conditions, most home visits can be entered in the appointment book like any other scheduled patient visit for routine follow up.[17] The following circumstances might require nonroutine visits[16]: discrepancies in patient's reported functioning, acute declines in the health or function of frail patients, unexplained failure to thrive, unexplained failure of the care plan, request for physician evaluation in the home by another team member, and need for a patient or family meeting to make an important decision. Many of these kinds of visits can also be scheduled.

Key points

- Home visits by family physicians have declined drastically during the last 50 years, but shorter hospital stays might prompt an increase in such visits to monitor care at home properly.
- Home visits are appropriate for those recently discharged from hospital, for frail elderly people, for disabled patients, and for those receiving palliative care.
- Home visits permit family physicians to assess information unavailable in the office, in particular, mobility, activities of daily living, social supports, nutrition, environmental hazards, and medications.
- Information from home visits permits family physicians to work much more effectively with home care teams.

Points de repère

- Les visites à domicile par les médecins ont connu un déclin dramatique au cours des 50 dernières années, mais des séjours plus courts à l'hôpital pourraient se traduire par une hausse dans le nombre de ces visites pour surveiller de manière appropriée les soins à domicile.
- Les visites à domicile conviennent aux patients qui viennent de recevoir leur congé de l'hôpital, aux personnes âgées fragiles, aux patients handicapés et à ceux qui reçoivent des soins palliatifs.
- Les visites à domicile permettent aux médecins d'évaluer l'information qui n'est pas disponible au cabinet, notamment sur la mobilité, les activités de la vie quotidienne, les soutiens sociaux, la nutrition, les dangers environnementaux et les médicaments.
- Les renseignements tirés de la visite à domicile permettent aux médecins de travailler beaucoup plus efficacement avec les équipes de soins à domicile.

Equipment. The equipment required for making a home visit is relatively simple. A black bag is not necessary; any briefcase will do. It is essential to have all the equipment required readily available and stored in the car to avoid going through the preparations each time and to be able to make calls from home and on the weekend on the rare occasions that it is necessary.

Required equipment includes thermometer, stethoscope, blood pressure cuff, otoscope, gloves, lubricating jelly, tongue depressors, prescription pads, and blank death certificates. Optional equipment includes blood-collecting equipment and laboratory requisitions (tests for occult blood in stool). A very important piece of nonmedical equipment is a street map.

Conclusion

The current trend toward home care of various types compels family physicians to be open to home visiting. We have presented a simple approach to evaluating patients and their home environments, to making a care plan in collaboration with a local home care team, and to incorporating home visits into practice. Home visiting can be a valuable and rewarding complement to office or clinic-based family practice.

Correspondence to: *Dr C. Ferrier, Montreal General Hospital, Room D17-173, 1650 Cedar Ave, Montreal, QC H3G 1A4; telephone (514) 934-8015; fax (514) 934-8286; e-mail* catherine.ferrier@muhc.mcgill.ca

References

1. Meyer GS, Gibbons RV. House calls to the elderly—a vanishing practice among physicians. *N Engl J Med* 1997;337(25):1815-20.
2. Keenan JM, Boling PE, Shwartzberg JG, Olson L, Schneiderman M, McCaffrey DJ, et al. A national survey of the home visiting practice and attitudes of family physicians and internists. *Arch Intern Med* 1992;152:2025-32.
3. Adelman AM, Fredman L, Knight AL. House call practices: a comparison by specialty. *J Fam Pract* 1994;39(1):39-44.
4. Picard A. Behind closed doors: the struggle over homecare. Part 1: 'It never, never stops.' *Globe and Mail* 1999 Mar 20;Sect A:8 (col 3).
5. Coyte PC, Young W. Regional variations in the use of home care services in Ontario, 1993-95. *Can Med Assoc J* 1999;161(4):376-80.
6. McWhinney IR, Bass MJ, Orr V. Factors associated with location of death (home or hospital) of patients referred to a palliative care team. *Can Med Assoc J* 1995;152(3):361-7.
7. Stajduhar KI, Davies B. Death at home: challenges for families and directions for the future. *J Palliat Care* 1998;14(3):8-14.
8. Wieland D, Ferrell BA, Rubenstein LZ. Geriatric home health care, conceptual and demographic considerations. *Clin Geriatr Med* 1991;7(4):645-64.
9. Steel K, Leff B, Vaitovas B. A home care annotated bibliography. *J Am Geriatr Soc* 1998;46:898-909.
10. Weissert WG, Hedrick SC. Lessons learned from research on effects of community-based long-term care. *J Am Geriatr Soc* 1994;42:348-53.
11. Ramsdell JW, Swart JA, Jackson JE, Renvall M. The yield of a home visit in the assessment of geriatric patients. *J Am Geriatr Soc* 1989;37:17-24.
12. Van Rossum E, Frederiks CMA, Philipsen H, Portengen K, Wiskerke J, Knipschild P. Effects of preventive home visits to elderly people. *BMJ* 1993;37:27-32.
13. Clarfield AM, Bergman H. Medical home care services for the housebound elderly. *Can Med Assoc J* 1991;144(1):40-5.
14. Campion EW. Can house calls survive? *N Engl J Med* 1997;337(25):1840-1.
15. Ham RJ. Getting the most out of a home visit. *Can Fam Physician* 1986;32:2677-82.
16. American Medical Association Home Care Advisory Panel. Guidelines for the medical management of the home care patient. *Arch Fam Med* 1993;2:194-206.
17. Knight AL, Adelman AM. The family physician and home care. *Am Fam Physician* 1991;44(5):1733-7.
18. Scanameo AM, Fillit H. House calls: a practical guide to seeing the patient at home. *Geriatrics* 1995;50(3):33-9.
19. Keenan JM, Hepburn KW. The role of physicians in home health care. *Clin Geriatr Med* 1991;7(4):665-75.
20. Bergeron R, Laberge A, Vézina L, Aubin M. Which physicians make home visits and why? A survey. *Can Med Assoc J* 1999;161(4):369-73.
21. Boillat ME, Gee D, Bellavance F. Ethical conflicts in home care. Patient autonomy and physician advocacy. *Can Fam Physician* 1997;43:2136-42.
22. Burton JR. The house call: an important service to the frail elderly. *J Am Geriatr Soc* 1985;33:291-3.
23. Finucaine TE, Burton JR. Community-based long-term care. In: Hazzard WR, Bierman EL, Blass JP, Ettinger WH Jr, Halter JB, editors. *Principles of geriatric medicine and gerontology*. 3rd ed. Toronto, Ont: McGraw-Hill; 1994. p. 375-82.