

afford to hire personal doctors were almost always seen by physicians in their own homes. Those who were poorer would tend to receive a more industrialised form of medical services in hospitals. By the 20th century, medical treatment had evolved into a more hospital-centric and specialised service. While treatment outcomes improved significantly, the delivery of cure had also become increasingly less personal. However, in the later part of that century, things began to change. Patients wanted equal, if not greater, emphasis on "care" (in comparison to "cure") from their physicians. They also wanted more control and autonomy over their own treatment. The escalating cost of acute care in hospitals also meant that less expensive sites of care quickly became more attractive as alternatives. Together with the advancement in technologies that enable the delivery of care outside acute hospitals, home medical services are fast gaining acceptance and popularity.

In Singapore, little data is available on the demand and actual provision of home medical services. A discrepancy exists due to issues related to affordability, which can to some extent, be attributed to the challenges of high transportation and manpower costs, and the opportunity costs of the doctors being absent from their clinics, including the time spent travelling to patients' homes. When priced realistically, such services tend to be out of reach to many patients, particularly when they are not offset by external assistance such as government subsidies or charitable donations. Some may be able to afford, but are unable to stomach the outof-pocket payments. However, if home medical services are priced affordably, providers will likely find it difficult to achieve cost recovery, let alone earnings. Business sustainability will then become an issue. This is perhaps one of the reasons why many doctors decline to provide house calls, while some would make an exception only for long term patients whom they have known for a long time.

Home medical care is, however, more than just a matter of cost and convenience to frail and disabled patients. Its benefits include the provision of continuity of care to a select group of patients who would otherwise be inconsistent with their medical follow-ups, or even default maintenance care. For these patients suffering from significant physical or cognitive impairment, on-site provisions of care allow doctors and other healthcare professionals to better appreciate the role played by the patients' home environments in determining final functional independence. During patients' convalescence at home, doctors will be able to institute interventions to facilitate the creation of an environment that is enabling in terms of optimising functional status and quality of life. Another equally important factor is that medical consultation in patients' homes will promote better understanding of the patients' values and problems in the context of their families. Nonetheless, in addition to financial sustainability, there are some key professional issues that will confront providers of home medical care.

Challenges for home medical care providers

Firstly, those who have been involved with home medical services would recognise that it requires a slightly different set of clinical knowledge, skills and experience compared to acute or ambulatory primary care. In addition to diagnostic and therapeutic expertise, there is also a need for collaborative skills in order to negotiate treatment options with patients' caregivers and families. A related question would be: does a basic medical degree sufficiently qualify a doctor as a professional home healthcare provider? Provision of medical services in the homes of patients was certainly not in the hospital-centric medical undergraduate curriculum that my classmates and I went through many years ago. Doctors who intend to transit into home medical care may need to undergo an orientation or conversion course to equip them with the appropriate knowledge and skills.

Practitioners should also be acutely aware that this is not the usual environment where they practice, which brings me to my next point – there is a need for adaptive skills to manage patients in the context of their home environments. The physical conditions in which the medical evaluation will take place are invariably not as ideal as clinics or wards, as far as physical examinations are concerned. For example, the lighting may not be adequate, the patients may not be comfortably accessible due to the positioning of their beds, and storage conditions for medications may not be ideal. Doctors will also need to do without the usual equipment used for diagnosis, monitoring or treatment if these are too bulky to be transported to the homes. Compared to hospitals and medical centres, doctors may also lack the usual professional support, for example: easy access to opinions or "curbside consults" from colleagues. Such disadvantageous conditions can occasionally be modified with some ingenuity, but most of the time, doctors have to adapt and accept these limitations to their professional objectives. These less-than-ideal realities in patients' home environments generally mean that compromises from the clinical standards that doctors are used to when on their "home ground" are generally inevitable.

In addition, doctors providing home medical care need to be aware of the "reversal in roles", where they are guests in the place of practice, at the invitation of the hosts (patients or guardians). This has definite implications on the professional boundaries of the doctor-patient relationship, and can potentially lead to obvious limitations in the degree of intervention, for example, in terms of infection control, home renovations and drug provenance. All these may require significant amount of negotiations and compromises before alignment of professional goals with goals of patients and their families can be achieved.

This gives rise to the next consideration, which is on the issue of the "standard of care" expected from doctors. A question that frequently arises is whether professional home medical care should be entitled to a different and perhaps less stringent standard of care, given the constraints and limitations peculiar to such a service. Intuitively, it would seem unreasonable and impracticable to apply the routine standard of care for clinics and hospital wards, directly to home medical care. But if this were to be different, in what way should it be different? Are there no fundamentals to abide by, for example in the ethical duties expected of doctors, which should apply regardless? If the standard in each case is decided by taking into consideration the contextual circumstances of each patient's home, how do we deal with the countless variations?

When doctors and their medical teams enter the patients' homes, they become very familiar with their patients' home environment and family dynamics. In many of these homes and families, decision making is on a familial rather than individual basis. There is often a complex network of relationships that impacts the way in which care is delivered and received. Indeed, family relationships can be a potential source of strength and facilitative force in creating a positive therapeutic environment. Conversely, it can also be a source of stress and conflict for patients and their caregivers. Factors that may influence the dynamics of decision making in a home care setting include pre-existing familial dynamics and decision-making model, patients' degree of financial independence and adopted financial arrangement within their families, patients' decisionmaking capacity, the expected cost and duration of the care necessary for patients, and most importantly, family members' willingness to sacrifice their own interests for patients, including modifying their lifestyles to accommodate patients' needs and dependency.

Other factors that may also play a part in decision making include the patients and their families' interpretation of the concept of filial piety and intergenerational solidarity within the family, the patients' perception towards what constitutes a "good life" (quality or quantity of life), including an altruistic desire to avoid burdening their families and views towards advance care planning. Put simply, the goals of care and doctors' professional and ethical obligations need to ultimately be established in the context of patients' homes and family relationships. A failure to do so will result in unmet needs of the patients, despite managing them in their own homes.

Development of home medical services in Singapore

In view of these challenges, how can the development of home medical services be enhanced in Singapore?

Firstly, the medical profession itself needs to acknowledge that home medical care is not similar to hospital or ambulatory care, and to avoid making a direct extrapolation in terms of the expected professional competencies and accountability. Home medical practitioners will need to

gradually develop the appropriate body of knowledge and practice benchmarks so there can be some consistent minimal standard of care, which is also acceptable and adoptable by the regulators as a reasonable and fair regulatory framework for home medical services.

Secondly, doctors providing care in their patients' homes should consciously adopt a balanced approach between patient advocacy and the overall interests of the families, in order to engage and sustain them as an effective unit of care partners. In advancing the care goals of patients, the principles of biomedical ethics need to be applied in the context of family dynamics and relationships. Home medical care can easily be construed as both physically and socially intrusive, which therefore demands a greater degree of trust and therapeutic alliance between providers and recipients of such services as compared to hospital and conventional ambulatory care.

Thirdly, policymakers should develop an innovative financing model that is viable and sustainable, so that those who truly need home medical care will not opt out solely due to financial constraints. While such services may appear costly, they can potentially lead to significant savings by avoiding unnecessary hospitalisation. By taking a holistic view of the total healthcare expenditure, policymakers can render such services more logical and viable in the context of an ageing population. Assistance from the Government and voluntary welfare organisations is, however, only part of the solution. More precise targeting of appropriate cases, better organisation of daily work flow and geographical coverage, as well as a critical point where volume of cases leads to economy of scale, are strategies that will provide optimism to the long term viability of this care model. Embracing technologies such as remote monitoring and telehealth can potentially allow more efficient utilisation of resources. Finally, as a service deeply embedded in the community, home medical services will surely benefit from a joint medical-social care platform which facilitates closer and more systematic working partnerships with the social care sector, including community social workers and case managers.

Bringing professional care into patients' homes is critical in achieving the therapeutic goals for a select group of patients, whose numbers are gradually increasing. For many of us, it entails moving out of our comfort zone. But as a patient-centric profession, it is a new challenge we must confront with agility and tackle innovatively. **SMA**



A/Prof Chin is President of the 54th SMA Council. Like most doctors, he too has bills to pay and mouths to feed, and wrestles daily with materialistic desires that are beyond his humble salary. He, however, believes that a peaceful sleep at night is even more essential.