

# Programmed shared medical appointments

## *A novel procedure for chronic disease management*

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### Background

In 2013, the Australasian Society of Lifestyle Medicine (ASLM) introduced shared medical appointments (SMAs) for managing chronic disease in clinical practice. The popularity of SMAs has increased with the shift towards a Health Care Homes model. Programmed shared medical appointments (PSMAs) are an extension of the standard SMA model, designed to help manage more complex and specific chronic disease issues.

### Objective

The objective of this article is to describe the process of PSMAs and consider their use in primary care.

### Discussion

PSMAs combine sequential medical consultations with peer support and interaction in a semi-structured group education arrangement. SMAs and PSMAs are ideally suited to the Health Care Homes model of clinical care currently proposed by the federal Department of Health. Proof of concept is currently being tested for PSMAs. Conditions suitable for future trials include overweight and obesity, diabetes (including pre-diabetes), cardiovascular diseases, chronic kidney disease, chronic obstructive pulmonary disease or emphysema, chronic pain or arthritis, mild anxiety or depression, perisurgical management and cancer survival.

**AS LIVING CONDITIONS CHANGE**, so do the diseases that afflict human societies. With economic development, for example, countries experience an 'epidemiological transition' that results in a shift from a predominance of acute, infectious diseases to one of chronic, non-infectious ailments.<sup>1</sup> This is reflected in the fact that 60–70% of all visits to a doctor are now thought to have a predominantly lifestyle-based cause.<sup>2</sup> Several studies have shown that these chronic, non-infectious ailments can be improved by lifestyle-related changes.<sup>3–5</sup> Hence, a discipline of lifestyle medicine has arisen to help manage these conditions at the clinical level.<sup>6</sup>

Lifestyle medicine had its genesis towards the end of the last millennium. Its formation was based around health problems associated with our modern ways of living. These included inactivity, poor nutrition and overnutrition, smoking, drugs and alcohol abuse, inappropriate medication, stress, sexual behaviours, inadequate sleep, risk-taking and environmental exposure (ie sun, chemical, built environment). Lifestyle medicine has been defined as 'a form of health promotion and branch of medicine targeting prevention and management of lifestyle-related diseases'.<sup>7</sup> Associations in lifestyle medicine have arisen around the world (eg [www.lifestylemedicine.org.au](http://www.lifestylemedicine.org.au)), postgraduate training is currently offered in several institutions, and a growing number of texts are now available.<sup>6,8–10</sup>

A structure and methodology for lifestyle medicine (explained in detail elsewhere)<sup>7,11</sup> has been outlined under four categories:

1. Epidemiology (the science)
2. Skills (the art)
3. Tools (the materials)
4. Processes (the actions).

Shared medical appointments (SMAs)<sup>12</sup> have been developed as a specific and appropriate clinical process for lifestyle medicine. This article expands on SMAs to consider 'programmed' shared medical appointments (PSMAs) as a proposed additional process with potential benefits for chronic disease management.

### SMAs as a process in lifestyle medicine

The standard clinical interaction in medical care has typically occurred on a one-to-one basis: one clinician with one patient. This is largely a product of history, with a logical base in transmission of information (and possible treatment options) from expert to patient. However, a trawl through the literature yields no evidence for the superiority of this model over any other. While the standard clinical interaction has intuitive value for acute treatment, it is less suitable for the extended and ongoing management required for dealing with chronic diseases.<sup>6</sup>

SMAs on the other hand are 'consecutive individual medical visits carried out in a supportive group setting of similar patients where all can listen, interact, and learn'.<sup>12</sup> SMAs involve a medical practitioner (eg general practitioner [GP] or specialist) consulting with patients sequentially among a group of patients who can interact throughout the consultation, under the guidance and direction of a trained facilitator (usually a practice nurse or other allied health professional). Issues arising from the group consultation format, such as confidentiality and peer dynamics, have been dealt with in previous manuals and articles.<sup>12–15</sup> Other issues such as 'no shows' are considered in the same fashion as a standard consultation.

SMA began in the US more than two decades ago.<sup>12</sup> In an Australian trial completed in 2014, we reported successful process outcomes with homogeneous chronic disease groups such as type 2 diabetes, metabolic disorders and chronic pain.<sup>14-15</sup> We also trialled the process and facilitator training with several Aboriginal and Torres Strait Islander men's groups.<sup>16</sup> We found this form of 'shared medical yarn-up' to be a better fit for Aboriginal and Torres Strait Islander healthcare than the standard clinical approach of a non-Indigenous doctor with a single Aboriginal and Torres Strait Islander man in a closed room. In studies completed overseas, SMAs have generally been found to exceed or at least be comparable in clinical outcomes to standard consultations.<sup>17</sup> Here, we suggest that an expansion of the standard SMAs approach may facilitate improved processes for specific chronic diseases.

## PSMAs

SMAs can involve heterogeneous groups with a range of standard medical problems. In the US, these are called drop-in group medical appointments (DIGMAs).<sup>12</sup> They usually run at a standard time each week, and are used primarily for providing more accessible acute care and reducing waiting lists. More commonly, groups are homogeneous in relation to ailments and are conducted episodically or on a regular basis. If undertaken regularly, an extension of the SMA model, incorporating a more structured educational component, is the PSMA.

We define PSMAs here as 'a sequence of SMAs in a semi-structured form providing discrete educational input relating to a specific topic'. PSMAs allow for a set number of SMAs (eg four to eight), performed over a protracted time-course (eg two to eight months), having a doctor in all or some sessions, and run by a facilitator with extra training in the disease topic. PSMAs provide a novel opportunity for managing chronic diseases with proven, structured educational input provided through a lecture or discussion format using standardised audiovisual presentations and handout materials. However, this needs to be

distinguished from group education. An example is the 'Possums' program for mothers and disturbed babies in Queensland.<sup>18</sup> A standard program that contains background information, patient education handouts, educational material, practical exercises and learning activities was developed. The program was built into an SMA framework, where a facilitator (allied health professional) trained in the presentation of the topic, runs an educational program combined with occasional medical consultations with a doctor over a series of sessions.

PSMAs provide opportunities for patients with chronic diseases to receive sequenced information and education in addition to ongoing care and support from healthcare practitioners and peers. The procedure could be applied to weight loss, smoking cessation, diabetes, prediabetes, metabolic syndrome, unspecified chronic pain, cardiac rehabilitation, anxiety/depression, and a range of other chronic ailments at the primary, secondary and tertiary care levels.

### Example: Weight loss and PSMAs

In a meta-analysis of the role for primary care in obesity management in the US, Ard concludes that 'overall, the evidence suggests that obesity treatment delivered in primary care has limited effectiveness ... [however] ... given the influence and reach of primary care providers we cannot afford for them to be sidelined in the treatment of obesity in larger populations'.<sup>19</sup> An example of the potential cost-effectiveness of PSMAs, based on data provided by Ard, is shown in Box 1.

PSMAs are a potential way to increase the efficacy and cost-effectiveness of obesity management in primary care. This is because successful weight reduction and long-term weight loss maintenance are likely to require:

- multidisciplinary involvement, with medical input and peer support over time
- greater involvement of patients in their own care
- evidence-based, but understandable and actionable weight-loss information
- significant time for counselling, individually and as a group

- options for referral
- reasonable financial rewards for providers and centres.

Such processes are difficult to achieve in a one-to-one clinical environment. The advantages of PSMAs in helping achieve these, for patients, clinicians and clinics, as suggested by Noffsinger,<sup>12</sup> are shown in Box 2. A standard scheduling of a PSMA within a general practice is shown in Box 3.

PSMA sessions may not always involve GP consultations, depending on how far apart the sessions are planned. We are currently testing proof of concept of a PSMA in weight control in eight primary care centres on the south coast of New South Wales. In this design, the first three sessions are two weeks apart, followed by three others a month apart, and two final sessions that can be completed either online or in a group, depending on the patient's preference. With weight control, this design is aimed at providing more time to develop established habits. PSMAs around other chronic diseases (eg quitting smoking, chronic pain) may be better carried out over a shorter period, and involve more (or less) medical intervention.

The current weight loss trial was developed largely from the 'GutBuster's' men's waist loss program,<sup>20</sup> which reported a success rate of >20% of participants reducing waist size by >5% and maintaining this for more than one year.<sup>21</sup> Centres were selected from volunteers, but chosen selectively on the basis of a rating of criteria developed from previous experience with weight control. A checklist (Box 4) was also developed as an objective assessment of proof of concept for PSMAs.

For the current trial, facilitators were selected from volunteer allied health professionals (practice nurses, dietitians, diabetes educators, exercise physiologists). Two days were spent training in preparation for conducting the SMAs and specific weight-loss sessions: Day one on running SMAs and Day two on the scientific basis of weight control and familiarisation with the structured program. Facilitators were also required to study online resources and complete an evidence-based, multiple-choice exam on weight management ([www.lifestylemedicine.org.au](http://www.lifestylemedicine.org.au)). The aim was for each facilitator to satisfy, as best as

### Box 1. Potential cost-effectiveness of PSMA for weight control

In one systematic review,<sup>19</sup> 11–26 individual clinical visits over one year led to an average of 4–7 kg more weight loss, compared with the control group. If extrapolated to Australia, and assuming an average of 18 consultations lasting 15 minutes at a cost of MBS item number 23, this would cost ~\$670 and require 4.5 general practice hours per patient.

If the same result could be achieved in eight PSMA sessions with 10 patients/group (using the same MBS cost assumptions), this would cost ~\$300 per patient. However, it would save 37 hours of GP time over one year and patients would have almost twice as long with the GP, plus facilitator and peer support

*GP, general practitioner; MBS, Medicare Benefits Schedule; PSMA, programmed shared medical appointments*

### Box 2. Potential advantages of SMAs and PSMA<sup>12,13</sup>

#### For patients

- Extra time with own doctor and more relaxed pace of care
  - Emotional support and understanding from peers
  - Answers to questions they might not have thought to ask
  - More extensive medical and educational inputs
  - Greater education of self-management and attention to psycho-social matters
- Bottom line: Improved patient health and wellbeing, and enjoyment of the experience

#### For clinicians

- Reduced repetition of information; more fun and more relaxing
  - Better support for GP (from patients and facilitator)
  - Better management of waiting lists and demanding patients
  - Reduced individual GP or specialist visits
  - Time to address educative questions more comprehensively
- Bottom line: Improved provider efficiency and work satisfaction

#### For clinics

- Containment of costs while increasing efficiencies
  - 'Frequent flyers' can be treated more attentively
  - Improved quality of care and efficiency in care provision
  - Being innovative in their practice
  - Makes the practice more of a 'patient-centred medical home'
- Bottom line: Improved outcomes and efficiencies

*Adapted from Egger G, Binns A, Cole MA, et al. Shared medical appointments. Aust Fam Physician 2014;43(3):151-54, with permission from The Royal Australian College of General Practitioners. GP, general practitioner; PSMA, programmed shared medical appointments;*

possible, the 'Provider competencies for prevention and management of obesity' unit as developed by the US Academies of Science.<sup>22</sup> Separate programs were planned for males and females. Ongoing support was provided for facilitators and patients through the internet and ongoing research.

Training for facilitators in SMA/PSMA management is currently provided by the Australasian Society for Lifestyle Medicine (ASLM). Funding for groups is possible through standard Medicare Benefits

Schedule (MBS) item numbers, which require a minimum time per patient, but make no specifications about 8–10 others with similar problems being present at, and contributing to, that consultation. This process is currently under review by Medicare. The SMA/PSMA process, however, is probably better suited to the Health Care Homes capitation funding model currently being trialled within selected Primary Health Networks (PHNs) throughout Australia. On the basis of early

findings from the current weight loss trial, a standardised format for other chronic disease PSMA is being considered by ASLM, in conjunction with recognised experts in specific chronic diseases.

### Summary

SMAs and PSMA are innovative approaches to chronic disease management. The SMA model is available for all primary care centres and can be used selectively as an adjunct process for appropriate chronic conditions. To date, PSMA have been developed for mothers and disturbed babies, and for weight control. The model, however, is amenable for use with many other chronic disease categories. A standard format for running these is currently being considered, along with future trials of programs, such as quitting smoking, chronic pain and (low level) anxiety/depression, developed in conjunction with acknowledged experts in each of these chronic disease specialties. Proof of concept<sup>23</sup> trials will establish their effectiveness and suggest other chronic diseases possibilities for PSMA.

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**Box 3. Scheduling of a PSMA**

	Session 1	Sessions 2-4/8
1. Introduction and warm-up (facilitator only)	~5-10 minutes	~5 minutes
2. Structured educational session (trained facilitator only and/or specialist allied health professional)	~30-40 minutes	~30 minutes
3. Individual general practice consultations (facilitator and doctor)	60 minutes	60 minutes
4. Summing up and questions and answers (trained facilitator and/or specialist allied health professional)	~5-10 minutes	~5 minutes
Total time	~100-120 minutes	~40-100 minutes*

\*Depending on whether medical consultations involved or not

**Box 4. Proof of concept checklist related to PSMA's**

Questions related to the procedure	Y	N	Measures
1. Is it structured around sound, evidence-based principles?			Evaluative research; expert advice
2. Does it do what it claims to do for representatives of the target population?			Outcomes measures; questionnaire responses
3. Is the retention rate over time adequate?			Data records
4. Does it result in positive changes in health parameters?			Outcome measures; questionnaire responses
5. Is it enjoyed and valued by participants?			Questionnaire responses
6. Is it enjoyed and valued by providers?			Semi-structured interviews
7. Would participants recommend the process to others?			Questionnaire responses; focus group evaluations
8. Do patients rate this, at least as highly for this problem, as the standard comparative process?			Questionnaire responses; focus group evaluations
9. Is it cost-effective and time-effective for the clinic and participants?			Economic analysis
10. Are other healthcare providers likely to adopt it?			Survey analysis
11. Is the target audience big enough and the potential demand great enough to justify and sustain it?			Market analysis
12. Does it reach a wider patient audience than the standard comparative process?			Demographic/psychographic analysis
13. Does it incorporate the advantages of a standard comparative process?			Process analysis
14. Does it reduce any disadvantages of a standard comparative process?			Process analysis
15. Is it time efficient for participants and providers?			Questionnaire responses

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