Attitudes of GPs to medical management in a falls clinic service

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BACKGROUND
Intervention programs that target falls risk factors can be effective. Falls clinics that use detailed multidisciplinary assessment are relatively new in Australia and it is not known how they are perceived by general practitioners.

METHOD
A survey of referring GPs' attitudes to a falls clinic service and an audit of changes to patients' medical management resulting from falls clinic advice.

RESULTS
General practitioners were largely satisfied with the falls clinic service, although they did not often change their patients' medical therapy as a result, or feel that review in the falls clinic had reduced their patients' frequency of falling.

DISCUSSION
Further work is needed to confirm that the reductions in falls achieved in clinical trials are also being found in routine clinical practice. Alternative models of falls prevention and falls clinics could be explored, in partnership with primary care providers.

Falls are a major geriatric syndrome and are associated with a substantial burden of morbidity and costs to the health care system.[1] These costs are anticipated to increase due to aging of the population. Morbidity associated with falling includes injury, loss of function and independence, and fear of falling. The main risk factors for falls are listed in *Table 1*.[2] Falls appear to be related to use of medications, particularly the use of psychotropic medications and psychotropic polypharmacy.[3–5] Polypharmacy, *per se,* appears to be a risk factor for falling but this may reflect the co-incident burden of multiple chronic diseases.[6]

Systematic reviews have found evidence that intervention programs targeting falls risk factors are effective in reducing falls. A 10–30% reduction in the risk of falling has been achieved with programs that are multifactorial, address home hazard reduction, decrease the use of psychotropic medicines or use tailored exercise interventions.[7,8] These studies tend not to focus on falls clinic patient populations, however, and there are few Australian studies. Medical interventions often rely on primary care practitioners for successful implementation. Some studies suggest a high level of adherence by primary care staff to recommendations made by secondary care assessors.[9,10]

Falls clinics in Australia are relatively new. The first Australian falls clinic opened in Melbourne in 1988. In Western Australia, falls clinics now operate at each metropolitan aged care service and provide a detailed multidisciplinary assessment including medical assessment, therapy assessments and nursing assessment.[11] While there is evidence supporting the efficacy of multidisciplinary interventions to prevent falls, the evidence for the specific falls clinic model of service delivery is limited. Intervention programs focusing on one component of care may be more cost effective.[12] In addition, reducing falls risk factors does not necessarily prevent falls.[13,14]

Our falls clinic is based in a secondary metropolitan hospital and accepts referrals from local general practitioners and members of the aged care assessment team for patients who have fallen in the preceding 6 months. Patients are assessed by the clinic's nurse, geriatrician or geriatric medicine trainee, physiotherapist and occupational therapist using a standard assessment proforma. Physiotherapists utilise the Physiologic Profile Assessment (PPA).[16] The PPA uses portable apparatus

to administer a series of tests of vision, sensation, strength, balance and reaction time.[17] Recommendations for management are generated at a multidisciplinary meeting, which includes input by a social worker. If appropriate, an individualised intervention program is provided, usually over 6–8 weeks. Patients are routinely reassessed following intervention. The PPA is repeated in order to evaluate improvements achieved.

We sought to determine the attitudes of GPs to our falls clinic and their opinion regarding the effectiveness of our service in preventing falls. We focused on GPs' changes to patients' medical management following falls clinic review. Medication changes were examined in more detail because modifying medical therapy is effective in preventing falls[15] and GPs are critical to the longer term success of any medication modification.

Table 1. Falls risk factors

Previous falls
Polypharmacy
Cognitive impairment or depression
Impaired vision and hearing
Gait deficit
Use of assistive device or impairment in ADL function
Arthritis and mechanical foot problems
Impaired balance
Muscle weakness
Incontinence
Unfavourable environment

Method

We wrote to the GP of each patient reviewed at the falls clinic over a 10 month period in 2004. A separate questionnaire was sent regarding the care of each patient, thus some GPs received multiple surveys. General practitioners were asked to document their patient's medication history, document any medication changes made subsequent to review in the falls clinic, and to indicate their agreement with several statements using a 5 point Likert scale (*Table 2, 3*). Respondents were also given the opportunity to provide general comments. Reminders were not sent to GPs who did not respond. Each patient's medication list and our recommendations regarding medications were simultaneously extracted from clinic correspondence.

This project was entered in the quality register of the Continuous Improvement and Safety Unit of Swan Districts Hospital.

Table 2. Characteristic of audit population

	Response received N=35	Response not received N=27
Mean age (years)	82	84
Female	24 (69%)	18 (69%)
Community dwelling (nonresidential care)	35 (100%)	26 (100%)
Use of walking aid or wheelchair	8 (24%)	10 (37%)
Frequent falls (>5 in 12 months)	15 (44%)	6 (23%)

Table 3. Questionnaire

'Suggestions regarding prescribing are helpful when a patient is reviewed in the falls clinic'
'Suggestions by falls clinic staff, regarding prescribing, have influenced my thoughts about prescribing for this patient'
'Suggestions by falls clinic staff directly influenced changes I made to this patients medical therapy'
'This patient's medical therapy is producing adverse effects'
'This patient's frequency of falling or tendency to fall was reduced by attendance at the falls clinic'
'Patients attending falls clinic should be given their own copy of any advice regarding their medications'

Results

Sixty-two questionnaires were sent to 46 GPs. Thirty-five responses were received (57% of eligible patients) from 25 GPs. Baseline characteristics are shown in *Table 2*. Patients' mean age was 83, and 69% were female. No patients lived in residential care facilities. The majority were independently mobile and fewer than half had frequent falls.

Generally GPs were positive regarding the falls clinic service. They felt that suggestions by the falls clinics regarding prescribing were helpful (mean score on Likert scale 4.2, range 2–5). Most GPs felt that suggestions by falls clinic staff had influenced their thoughts about prescribing for the patient (mean 3.8, range 3–5) and directly influenced changes made to the patient's medical therapy (mean 3.7, range 2–5).

Generally, GPs strongly agreed that patients attending falls clinics should be given their own copy of advice regarding their medications (mean 4.0, range 2–5). However, one GP felt that: 'Opinion from falls clinic is appreciated but confusion regarding medications is common, often worsened by attending yet another clinic'.

Most GPs did not feel that their patient's medical therapy was producing adverse effects (mean 2.4, range 1–4). Despite the positive responses regarding medical management in the falls clinic there was uncertainty whether attendance at the clinic had reduced their patient's frequency of falling or tendency to fall (mean 3.1, range 1–5). Changes made to patients' medical management are detailed in *Figure 1*. Twenty-seven specific recommendations regarding patients' drug therapies were made in clinic correspondence (*Table 4*), of which 18 were followed (64%).

Discussion

Although this survey demonstrates that GPs are largely satisfied with the service provided by the falls clinic, we found little evidence that GPs felt that their patient's risk of falling had been reduced following review in the falls clinic. Further data are needed to confirm that the reductions in falls demonstrated in clinical trials are being translated to routine clinical practice. It is important to note that important components of falls clinic medical management such as osteoporosis therapy focus on preventing

Table 4. Falls clinic recommendations

Nonpharmacologic (number of recommendations)

- Further investigation:
  - osteoporosis, cognitive, cardiac, incontinence and diabetes investigations (33)
- Multidisciplinary assessment and intervention:
  - physio, occupational, speech, diet and podiatric therapy and interventions (30)
- Sensory aids or ophthalmology review (9)
- Reducing alcohol intake or smoking (5)

Pharmacologic (number of recommendations)

- Modifying psychotropic therapy (10)
- Modifying antihypertensive therapy (8)
- Osteoporosis therapy and steroid withdrawal (6)
- Antidiabetic management (2)
- Other (2)

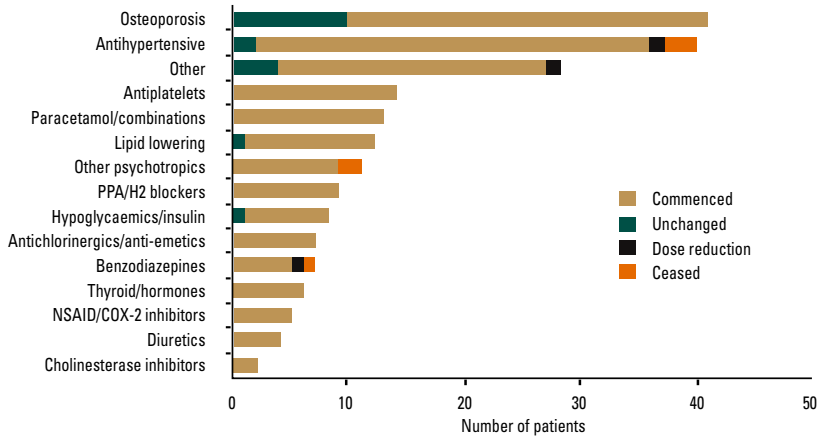

Figure 1. Changes to medical therapy, subsequent to falls clinic review, reported by GPs

harm from falls, rather than preventing falls. Additionally this study did not assess any of the other components of falls clinic intervention, such as strength and balance retraining and environmental modifications.

This audit is also limited by the small sample size and our failure to send reminders to GPs who did not return questionnaires. The response rate is considered reasonable for this type of survey. Eighteen GPs who responded may well have been more likely to implement recommendations from the falls clinic review compared to GPs who did not respond to the audit, introducing the possibility of bias. The audit population was also quite select. For example, there is a large burden of falls in the residential care sector. However, no patients living in the residential aged care sector were included in the audit.

Although GPs were generally positive about advice regarding medical management, we were surprised that so few changes to patients' medical therapy resulted from clinic review, relative to the total number of medications used. On the other hand, uptake of clinic recommendations was relatively high. This may indicate that medical therapy was often already near optimal. There may be a systematic bias in that GPs who chose to refer to the falls clinic had identified falls as a management problem and already had begun to institute appropriate medication changes. Review of patients' medical therapy by an allied health professional or the clinic medical officer, followed by liaison with the GP, may be reasonable for many patients. Alternatively, future intervention could focus on improving medication management in primary care. More detailed analysis of the interventions resulting from other components of the falls clinic service (nursing, physiotherapy and occupational therapy) is required.

Conflict of interest: none declared.

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