Published in final edited form as:

Prog Palliat Care. 2014 April 1; 22(2): 69–74. doi:10.1179/1743291X13Y.0000000068.

Prescribing practices in hospice patients with adult failure to thrive or debility

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Abstract

Objectives—Despite being a common admitting diagnosis, there is very little published literature on medication management in hospice patients admitted with a diagnosis of failure to thrive or debility. The purpose of this study was to describe medication prescribing practices in hospice patients with either of these primary diagnoses by characterizing prescribed medications by name and by pharmaceutical class, and determining whether the patient or the hospice organization provided each medication.

Methods—A retrospective review of a patient information database compiled by a national hospice organization was conducted. Patients were included in this retrospective study if they were admitted to hospice care with a primary diagnosis of failure to thrive or debility, and if they were admitted on or after 1 January 2010, and discharged by death on or before 31 December 2010.

Results—Overall 293 patients and 6181 medication entries were evaluated. The most commonly prescribed drugs were acetaminophen, lorazepam, morphine, atropine, prochlorperazine, haloperidol, docusate, aspirin, and bisacodyl. The most commonly prescribed pharmacological classes were opioid and non-opioid analgesics, anxiolytics, anticholinergics, antihypertensives, laxatives, antidepressants, and supplements. The hospice organization provided over 90% of prescriptions for analgesics, antipsychotics, anticholinergics, and anxiolytics, and these medications were discontinued before death in less than 5% of patients.

Conclusion—Recognized clinical components of failure to thrive syndrome include cognitive impairment, malnutrition, and depression. The hospice organization provided 80% of antidepressants, but infrequently provided appetite stimulants and drugs treating dementia. The most commonly provided drugs were those used for symptoms associated with most end-stage diseases.

Keywords

Debility; Failure to thrive; Hospice; Medication therapy

Introduction

Hospice care is defined by the Centers for Medicare and Medicaid Services as ‘an approach to caring for the terminally ill that provides palliative care rather than traditional medical care and curative treatment’.¹ Hospice care provides medical treatment and symptom management as well as emotional and spiritual support for patients and families at the end of life. The National Hospice and Palliative Care Organization reported that approximately 1.58 million patients received hospice care in 2010.²

Debility and adult failure to thrive are complex syndromes of functional decline that are not a process of normal aging. Patients with failure to thrive often present with a combination of symptoms including weight loss, anorexia, dehydration, depression, and impaired immune function.³ In order to be admitted to hospice care with a diagnosis of failure to thrive patients must have a likely prognosis of 6 months or less, and evidence of irreversible nutritional impairment, defined as a body mass index of less than 22 kg/m² resulting from poor nutrition, and either decline or fail to respond to enteral or parenteral nutrition. Patients are frequently significantly disabled.⁴ ‘Debility not otherwise specified’ is a diagnosis often used in place of failure to thrive when the above nutritional conditions cannot be met, yet the patient is experiencing multisystem failure. Debility was the admitting diagnosis of 13.0% of hospice patients in 2010,² yet there are very little data in the medical literature regarding palliative care practices in this population.

Medicare provides coverage of hospice services for patients with less than a 6-month life expectancy if their plan is to allow terminal illness to run its natural course (vs. curative interventions); medications for pain and symptom management related to the terminal illness are provided as part of this benefit by the hospice program.¹ For some disease states, drugs which fall into this category are fairly apparent. Patients with end-stage lung cancer, for instance, will generally have medications provided to them to manage pain and dyspnea. Patients with end-stage heart failure will generally be provided beta blockers, angiotensin receptor blockers, diuretics, and digoxin. It is more difficult to determine which medications are related to primary diagnoses of adult failure to thrive and debility, as these patients often have multiple chronic disease states and the cause of impending death can be difficult to determine.

The purpose of this study was to describe prescribing practices in hospice patients with admitting diagnoses of either failure to thrive or debility, by characterizing prescribed medications to hospice patients by pharmacological class and determining whether or not the hospice organization provided each medication.

Methods

In this retrospective study we characterized medication use for hospice patients admitted with a diagnosis of failure to thrive or debility. We used the electronic medical records containing patient and medication information compiled by Seasons Hospice & Palliative Care, a national hospice and palliative care organization with locations in 11 states in 2010.

Patients were included in the study if they were admitted to hospice with a primary diagnosis of failure to thrive or debility. We included patients who were admitted to hospice care on or after 1 January 2010, and were discharged by death on or before 31 December 2010. The University of Maryland institutional review board approved this study.

We determined medications prescribed at and during the hospice admission by evaluating medication orders in the hospice database, which included drug name, dosage form, dosing frequency, start dates, and discontinuation dates, as well as whether the hospice provided the medication. Medications were recoded prior to evaluation by generic name and then grouped by pharmacological class. Combination formulations (e.g. oxycodone plus acetaminophen) were evaluated as two separate medications. Drugs and pharmacologic classes were classified as likely to be used for chronic conditions or likely to be used for symptom management based on the consensus of the authors and on usual practice patterns in palliative care.

Routes of administration and indications for drug therapy were not explicitly recorded in the patient database, so these parameters were not evaluated. Only medication orders were available; we had no information on actual medication use. Finally, to describe the study population, we recorded demographic information, including patient age, sex, race, and primary state, and hospice length of stay.

Results

In 2010, a total of 4252 patients were in the hospice database. Of these, 293 met the inclusion criteria. The average age of patients included in this study was 86.4 years (range 26–105 years), of which 200 patients (68.3%) were female, and 222 (75.8%) were white. Patient characteristics are listed in Table 1.

Of the 293 patients evaluated, 102 patients (34.8%) were admitted with a primary diagnosis of failure to thrive, and 191 (65.2%) were admitted with a primary diagnosis of debility. The majority of patients resided in a skilled nurse facility on admission to hospice care (37.4%), followed by residing at home (25.6%), and in an assisted living facility (22.9%) (see Fig. 1A). These percentages were similar at the time of death. The average length of stay was 34.8 days (range 1–282 days).

Overall the 293 patients had 6346 orders. Orders for enteral supplements, oxygen, substances which could not be described as a single generic formulations (e.g. ‘enema’, ‘ear drops’, and ‘magic mouthwash’), and non-drug treatments (e.g. blood glucose tests, catheters) were excluded because they were not orders for medication. A total of 6181 medication orders were evaluated. The average number of unique medications recorded per

patient was 16.4 (range 1–44). In addition, we evaluated who provided the medication (hospice organization or patient) for 5209 medications; 972 orders had missing or invalid provider data, because provider status was not entered into the medical record.

Pharmacological classes used and common medications within each class are listed in Table 2. The most commonly prescribed drugs were acetaminophen, lorazepam, morphine, atropine, prochlorperazine, haloperidol, docusate, aspirin, and bisacodyl (Table 3). The most commonly prescribed pharmacological classes were opioid and non-opioid analgesics, anxiolytics, anticholinergics, antihypertensives, laxatives, antidepressants, and vitamins/supplements (Table 4). The hospice organization provided over 90% of medications in these pharmacological classes, with the exception of laxatives (88.6%), antidepressants (79.6%), antihypertensives (24.6%), and vitamins/supplements (17.1%).

Less than 5% of opioid and non-opioid analgesics (1.1 and 2.3%, respectively), anxiolytics (1.9%), anticholinergics (1.3%), antipsychotics (3.9%), and stool softeners were discontinued prior to death. The most commonly discontinued drug classes were anti-infectives (30.3%), cholinesterase inhibitors (29.7%), lipid-lowering agents (29%), diuretics (25.3%), and appetite stimulants (25%).

Discussion

In this study, we present the first data describing prescribing practices for patients admitted to hospice care with a diagnosis of failure to thrive or debility not otherwise specified. Failure to thrive is a term used to describe the decreased vitality of patients that is not attributable to any particular disease state. Debility is an admission diagnosis commonly used when patients have a life expectancy of less than 6 months, but do not meet criteria for admission under failure to thrive (for instance, no significant weight loss). There are no recent studies that describe the epidemiology of hospice patients with failure to thrive or debility. Patients in this study were primary female and white, findings that are consistent with other studies done in hospice populations.^{5–8}

Several studies have described prescribing practices for patients at the end of life, although to our knowledge no studies have specifically addressed patients with diagnoses of adult failure to thrive or debility. Similar to studies in other populations, we found a high prevalence of polypharmacy. One study of terminally ill cancer patients published in 2007 found that although there was a significant decrease in medications used for comorbid conditions near the end of life, this reduction was overshadowed by a concurrent increase in symptom control medications.⁹ Similar results were found in a population of outpatient Medicare beneficiaries: use of statins and osteoporosis drugs fell significantly as the probability of death increased, while the use of symptom relief medications intensified.¹⁰

Commonly prescribed medications

The most commonly prescribed medications for this population are appropriate for symptom management for general physical decline and the hospice organization appropriately provided those medications aimed at symptom management. Medications used to manage chronic medical conditions were prescribed less frequently than symptom-management

medications, and were less likely to have been provided by the hospice organization. We recognize that comorbid conditions will have a significant influence on the medications that are prescribed. In this study, the most commonly prescribed drugs were unsurprisingly those contained in the hospice organization admission kit, which included acetaminophen, haloperidol, atropine, lorazepam, morphine, and prochlorperazine. Similarly, the most frequently prescribed pharmacological classes were also for management of these common end-of-life symptoms. The hospice organization provided most of the prescriptions for medications related to these symptoms, and these medications were discontinued before death in less than 5% of patients. In patients with failure to thrive, many medications may exacerbate symptoms associated with debility or failure to thrive, including anticholinergics, benzodiazepines, antidepressants, and antiepileptic drugs.¹¹ The goal of life prolongation via medication use may not be a meaningful one given these patients' limited life expectancy.¹²

Antihypertensive agents, vitamins, or supplements, and antiplatelet drugs were also commonly prescribed, but not frequently provided by the hospice organization. The patient was responsible for obtaining these medications, either as an out-of-pocket expense or provided by another third-party payer. Despite the fact that these medications were not provided by the hospice organization and therefore unrelated to the terminal diagnosis, more than half of patients prescribed these drugs had active medication orders until death. For instance, 30% of patients were prescribed an antiplatelet drug (primarily low-dose aspirin) at or during admission in hospice care. The antiplatelet benefits of this drug are questionable in a population of patients who, on average, died in 2 months. Aspirin can increase the risk of gastrointestinal bleeding in older patients. While it is not surprising that the hospice organization infrequently provided antiplatelet drugs, the fact that these medications were only discontinued in 14% of patients before death is surprising. Reasons for this may include refusal of the patient or caregiver to discontinue the medication, incomplete documentation of drug discontinuation, a belief that benefits outweighed risks, or inadequate patient/caregiver education or communication.

Treating hallmark symptoms of failure to thrive

Although failure to thrive is a condition with many possible symptoms, the four hallmarks of this disorder are depression, cognitive impairment, malnutrition, and decreased physical functioning.¹³ In this study 41% of patients were prescribed an antidepressant during their admission. The hospice organization provided nearly 80% of these prescriptions. Mirtazapine was the only antidepressant among the 25 most frequently prescribed medications (prescribed in 11.3% of patients), possibly due to multiple potential indications (e.g. anorexia, insomnia). Without more detailed information, it is impossible to determine whether patients were being screened or treated appropriately for depression. The diagnosis of depression is frequently complex in patients with advanced illness, since fatigue, loss of appetite, sleep disturbance, and difficulty concentrating may be present in patients with or without depression.¹⁴ Treatment may also be complex, particularly considering that many antidepressants require several weeks to be effective, and this population of patients may not live long enough to perceive a benefit from treatment. Low-dose methylphenidate, a central nervous system stimulant, may be a safe and more rapidly effective option in patients

who are close to death.¹⁵ In this study, only three patients (1%) were prescribed methylphenidate.

The prevalence of cognitive impairment in adults over age of 65 years increases with increasing age,¹⁴ and symptoms may include personality changes, sleep disturbances, confusion, sleep disturbances, and inappropriate behaviors.¹⁶ Whether or not pharmacological management of dementia is appropriate in patients with end-stage failure to thrive or debility is unclear. While the use of acetylcholinesterase inhibitors is generally not considered appropriate in patients with advanced or end-stage dementia,¹⁷ patients with mild or moderate dementia who have a terminal diagnosis of failure to thrive may benefit. In this study 12.6% of patients were prescribed acetylcholinesterase inhibitors, and almost 70% continued these medications until death. Hospice provided approximately one quarter of these prescriptions. An important intervention regardless of dementia severity would be to examine currently prescribed medications and consider dose reduction or discontinuation of drugs commonly associated with cognitive impairment (e.g. anticholinergic drugs, steroids, opioids, benzodiazepines) as appropriate.

Malnutrition exists in all hospice patients with a diagnosis of failure to thrive, and is likely evident in many patients with general debility. Significant weight loss is required for admission to hospice under a primary diagnosis of failure to thrive. Vitamins and supplements were frequently prescribed in this population (in 36.9% of patients), in fact multi-vitamins were among the 20 most frequently prescribed medications. Although evidence of effectiveness in this population is lacking, an attempt to reverse malnutrition might explain the high proportion of prescriptions in this study. Hospice provided 17% of prescriptions for vitamins and supplements.

The evidence for use of appetite stimulants such as megestrol acetate and dronabinol in elderly patients is limited and there is no evidence of improved quality of life.¹⁸ In this study only 28 patients (9.6%) were prescribed appetite stimulants and 75% of patients had active orders until death. Approximately, one third of prescriptions for appetite stimulants were provided by the hospice organization. Although weight loss is a cardinal symptom of failure to thrive, the reluctance of the hospice organization to provide appetite stimulants is likely related to a lack of evidence in the literature, as well as to the natural decrease in appetite which occurs when patients are near death and is not associated with discomfort. As with cognitive impairment, a careful review of medications that can cause anorexia, dry mouth, nausea, and constipation may prove useful in improving appetite where possible.

Study limitations

Limitations of this study arise primarily from the retrospective design and a lack of detailed patient information in the database. Only the primary admitting diagnosis was listed, and information on comorbidities, which may have shed light on reasons for certain prescriptions, was unavailable. Additionally, the indications for medications were not recorded. Since many drugs can be used for different disease states (for instance, antidepressants may be used to treat depression or neuropathic pain), it was difficult to draw conclusions on which specific symptoms were associated with the use of certain medications, and whether the hospice organization might provide a medication for one

indication but not another. In this study we did not examine the rationales behind prescribing practices. There are a number of factors that might determine the decision to not provide a medication related to the terminal diagnosis that we could not assess, for example, patient preference for a non-formulary medication or attending physician prescribing preferences. We could determine whether the hospice organization was the provider for medications, but if the hospice organization did not provide the medication, we do not know by what mechanisms patients obtained the medications (e.g. self-pay, third-party prescription coverage). Data regarding the actual consumption of medications were not available, which is particularly relevant when evaluating 'as needed' medications for pain or other symptom management. Although these patients were all being cared for according to the policies of a single organization, symptom assessment, and treatment may have differed between treatment settings. Finally, although this organization has locations in several states, their policies and protocols may differ from other hospice organizations.

Conclusion

Failure to thrive and debility are relatively nebulous diagnoses which require careful review of medications at the time of, and throughout admission to hospice care. Our study confirms the diffuse nature of treatment for these conditions. In the United States the CMS will disallow these as admitting diagnoses in 2014. The hospice organization frequently provided antidepressant medications for these patients, in addition to medications used to treat other common symptoms at the end of life. Medications that target other aspects of failure to thrive, such as dementia and weight loss, were rarely provided. Interestingly, patients continued to receive many medications for chronic comorbid conditions despite these medications not being provided by the hospice organization. Epidemiological studies of this population could help to determine the appropriateness of medications at the end of life and future research should be aimed at better defining best practices for the treatment of these conditions.

Acknowledgments

Funding source

Holly Holmes is supported by a grant from the National Institutes of Health, K23 AG038476.

References

1. Medicare and Medicaid Programs. Hospice conditions of participation. Department of Health and Human Services, Center for Medicare and Medicaid Services. Federal Register. 2008; 73(109): 32088–32218.
2. NHPHO facts and figures: hospice care in America. Alexandria, VA: National Hospice and Palliative Care Organization; 2012.
3. Robertson RG, Montagnini M. Geriatric failure to thrive. Am Fam Physician. 2004; 70:343–50. [PubMed: 15291092]
4. Hospice and palliative care referral guidelines. Memphis, TN: Methodist Healthcare Hospice; 2009.
5. Karlsson IL, Ehnfors M, Ternstedt B. Patient characteristics of men and women cared for during the first 10 years at an inpatient hospice ward in Sweden. Scand J Caring. 2006; 20:113–21.

6. Wachterman MD, Sommers BD. The impact of gender and marital status on end-of-life care: evidence from the national mortality follow-back survey. *J Palliat Med.* 2006; 9:343–52. [PubMed: 16629564]
7. Greiner KA, Perera S, Ahluwalia JS. Hospice usage by minorities in the last year of life: results from the national mortality follow-back survey. *J Am Geriatr Soc.* 2003; 51:970. [PubMed: 12834517]
8. Carr D. Racial differences in end-of-life planning: why don't Blacks and Latino's prepare for the inevitable? *OMEGA.* 2011; 63(1):1–20. [PubMed: 21748919]
9. Currow DC, Stevenson JP, Abernethy AP. Prescribing in palliative care as death approaches. *J Am Geriatr Soc.* 2007; 55:590–5. [PubMed: 17397439]
10. Shaffer T, Simoni-Wastila L, Toler W, Stuart B, Doshi JA. Changing patterns in medication use with increasing probability of death for older Medicare beneficiaries. *J Am Geriatr Soc.* 2010; 58:1549–55. [PubMed: 20670381]
11. Verdery RB. Clinical evaluation of failure to thrive in older people. *Clin Geriatr Med.* 1997; 13:773.
12. Lee SP, Bain KT, Maio V. Appropriate discontinuation of medications at the end of life: a need to establish consensus. *Am J Med Qual.* 2007; 22:393. [PubMed: 18006418]
13. Sarkisian CA, Lachs MS. 'Failure to thrive' in older adults. *Ann Intern Med.* 1996; 124:1072–8. [PubMed: 8633822]
14. Kastenschmidt EK, Kennedy GJ. Depression and anxiety in late life: diagnostic insights and therapeutic options. *Mt Sinai J Med.* 2011; 78:527–45. [PubMed: 21748742]
15. Hardy SE. Methylphenidate for treatment of depressive symptoms, apathy, and fatigue in medically ill older adults and terminally ill adults. *Am J Geriatr Pharmacother.* 2009; 7:34–9. [PubMed: 19281939]
16. Beamer K. Providing optimal care to dying patients with dementia. *Nurse N Z.* 2011; 17:20–2.
17. Holmes HM, Sachs GA, Shega JW, Hougham GW, Hayley DC, Dale W. Integrating palliative medicine into the care of persons with advanced dementia: identifying appropriate medication use. *JAGS.* 2008; 56:1306–11.
18. Alibhai SM, Greenwood C, Payette H. An approach to the management of unintentional weight loss in elderly people. *CMAJ.* 2005; 172:773–80. [PubMed: 15767612]

Figure 1.
Setting at admission.

Table 1

Patient characteristics

Age	Years
Mean, SD	86.4, 10.5
Median	88
Range	26–105
Sex	<i>n</i> (%)
Female	200 (68.3)
Male	93 (31.7)
Race	<i>n</i> (%)
Caucasian	222 (75.8)
African American	40 (13.7)
Unknown	23 (7.9)
Hispanic	6 (2.1)
Pacific Islander	1 (0.3)
Asian	1 (0.3)
Length of stay	Days
Mean, SD	34.8, 50.8
Median	13
Range	1–282
Primary state of residence	<i>n</i> (%)
Maryland	96 (32.8)
Illinois	43 (14.7)
Michigan	40 (13.7)
Indiana	29 (9.9)
California	20 (6.8)
Wisconsin	20 (6.8)
Texas	12 (4.1)
Florida	12 (4.1)
Massachusetts	8 (2.7)
Pennsylvania	7 (2.4)
Delaware	6 (2.1)

Table 2

Frequently prescribed pharmacological classes and common drugs within those classes

Pharmacological class	Medications in this class
Opioid analgesic	Morphine, oxycodone, hydrocodone, methadone
Non-opioid analgesic	Acetaminophen, ibuprofen
Anxiolytic	Lorazepam, alprazolam,
Anticholinergic	Atropine, scopolamine, hyoscyamine
Antipsychotic	Haloperidol, prochlorperazine, quetiapine
Antihypertensive	Amlodipine, carvedilol, lisinopril, metoprolol
Laxative	Senna, bisacodyl, polyethylene glycol
Antidepressant	Citalopram, mirtazapine, sertraline, trazodone
Vitamin/supplement	Calcium, magnesium, vitamin C, iron, zinc
Acid reducer	Omeprazole, esomeprazole, ranitidine, famotidine
Antiinfective	Azithromycin, ciprofloxacin, metronidazole
Antiplatelet	Aspirin, dipyridamole, clopidogrel
Bronchodilator	Albuterol, ipratropium, tiotropium
Diuretic	Furosemide, hydrochlorothiazide
Stool softener	Docusate
Thyroid agent	Levothyroxine,
Antiepileptic drug	Gabapentin, valproic acid, leviteracetam
Antihistamine	Diphenhydramine, hydroxyzine, promethazine
Corticosteroid	Prednisone, dexamethasone
Lipid-lowering agent	Atorvastatin, simvastatin, cholestyramine
Cholinesterase inhibitor	Donepezil, galantamine
Appetite stimulant	Dronabinol, megestrol acetate

Table 3

Most frequently prescribed drugs

Drug	n (%)[*]
Acetaminophen	264 (90.1)
Lorazepam	252 (86.0)
Morphine	248 (84.6)
Atropine	206 (70.3)
Prochlorperazine	164 (56.0)
Haloperidol	145 (49.5)
Docusate	112 (38.2)
Aspirin	83 (28.3)
Bisacodyl	81 (27.7)
Magnesium	71 (24.2)
Senna	68 (23.2)
Albuterol	66 (22.5)
Levothyroxine	64 (21.8)
Furosemide	56 (19.1)
Metoprolol	56 (19.1)
Omeprazole	55 (18.8)
Multivitamin	53 (18.1)
Hydrocodone	49 (16.7)
Scopolamine	46 (15.7)
Ipratropium	39 (13.3)
Potassium	39 (13.3)
Calcium	38 (13.0)
Vitamin D	38 (13.0)
Lisinopril	35 (12.0)
Mirtazepine	33 (11.3)

* The number of patients prescribed the drug any time during the study period.

Table 4

Most commonly prescribed pharmacological classes

Pharmacological class	<i>n</i> (%) [*]	Prescriptions, <i>n</i> ^{**}	Provided by hospice, <i>n</i> (%) ^{**}	Discontinued prior to death, <i>n</i> (%) ^{***}
Opioid analgesic	272 (92.8)	569	554 (97.4)	3 (1.1)
Non opioid analgesic	259 (88.4)	448	427 (95.3)	6 (2.3)
Anxiolytic	257 (87.7)	428	428 (100.0)	5 (1.9)
Anticholinergic	238 (81.2)	370	353 (95.4)	3 (1.3)
Antipsychotic	203 (69.3)	556	549 (98.7)	8 (3.9)
Antihypertensive	138 (47.1)	252	62 (24.6)	28 (20.3)
Laxative	138 (47.1)	219	194 (88.6)	10 (7.2)
Antidepressant	120 (41.0)	176	140 (79.6)	20 (16.7)
Vitamin/supplement	108 (36.9)	240	41 (17.1)	23 (21.3)
Acid reducer	102 (34.8)	114	84 (73.7)	22 (21.6)
Antiinfective	89 (30.4)	155	100 (64.5)	37 (30.3)
Antiplatelet	88 (30.0)	120	22 (18.3)	14 (15.9)
Bronchodilator	79 (27.0)	148	93 (62.8)	7 (8.9)
Diuretic	75 (25.6)	97	56 (57.7)	19 (25.3)
Stool softener	72 (24.6)	83	83 (100.0)	3 (4.2)
Thyroid agent	63 (21.5)	72	14 (19.4)	11 (17.5)
Antiepileptic drug	50 (17.1)	64	27 (42.2)	10 (20.0)
Antihistamine	42 (14.3)	55	35 (63.6)	6 (14.3)
Corticosteroid	42 (14.3)	71	49 (69.0)	5 (11.9)
Cholinesterase inhibitor	37 (12.6)	34	9 (26.4)	11 (29.7)
Lipid lowering agent	31 (10.6)	36	4 (11.1)	9 (29.0)
Appetite stimulant	28 (9.6)	27	9 (33.3)	7 (25.0)

* The proportion of patients prescribed drugs within the pharmacological class during the study period.

** The total number of prescriptions in each drug class with provider data.

*** The proportion of patients prescribed drugs within the class who had those drugs discontinued prior to death.