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The Gold Standards Framework in Care Homes programme aims to improve the quality of end-of-life care for residents. The impact of introducing phase 2 of the programme to homes in England was evaluated. A pre–post survey design was adopted, focusing on indicators identified as markers of good end-of-life care. The 95 homes in phase 2 of the programme were invited to participate in the evaluation. Homes completed a baseline survey of care provision and an audit of the five most recent resident deaths. The survey and audit were repeated post programme completion. Forty-nine homes returned completed pre- and post-surveys, 44 returned pre- and post-data on deaths. Although some staff found completion of the programme challenging, homes that returned pre- and post-data demonstrated improvements in aspects of end-of-life care. There were statistically significant increases in the proportion of residents who died in the care homes and those who had an advanced care plan. Crisis admissions to hospital were significantly reduced. This evaluation indicates that appropriately funded structured programmes have the potential to assist nursing homes improve the provision of end-of-life care to older adults, in line with government health policy. *Palliative Medicine* (2009); **23**: 502–511

Key words: end-of-life care; nursing homes; older people; survey

Introduction

This article reports an evaluation of the implementation of the Gold Standards Framework (GSF), a model of end-of-life care, in nursing homes in England. The GSF helps practitioners to identify individuals in need of supportive end-of-life care, to assess their needs, symptoms, preferences and other concerns important to them (http://www.goldstandardsframework.nhs.uk/). Planning care around people's needs and preferences may enable their care choices to be met, allow individuals to live and die where they choose, and avoid emergency hospital admission.[1]

In 2004, the primary care GSF programme was adapted to address end-of-life care in nursing homes for older people (The GSF in care homes, GSFCH). The rationale for using the GSF programme in nursing homes was that it would assist care home staff, supported as appropriate by primary care and specialist colleagues, to improve end-of-life care.

Use of the GSF, alongside other end-of-life care programmes, is recommended in the National Health Service (NHS) End-of-life Care Programme,[1] which aims to improve end-of-life care provided by all health care staff, including those outside the NHS, and to extend the benefits of palliative care experienced by patients with cancer – to all those with end stage illness. Implementation of the GSFCH was supported by the NHS End-of-life Care Programme, with funding to strategic health authorities (SHAs) to support local implementation. Although the GSF programme is endorsed nationally, formal evaluation of the programme in care homes is vital, especially as the GSF was originally designated for a different care environment.

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Care homes for older people

Approximately 350,000 older people live in care homes in England,[2] and 410,000 in the UK as a whole.[3] This means there are three times as many beds in care homes as in the NHS.[4] Half of care homes are independent small businesses and half are in corporate ownership, with larger companies managing 52% of places.[5]

Care homes for older people may provide personal care or nursing care. In the United Kingdom, approximately half of all older people in care live in nursing homes.[6] Residents' experience multiple pathology, and co-morbidity and dementia, stroke and frailty are the most

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common reasons for admission.[7] Average life expectancy of self-funding residents in nursing homes is 20 months,[8] although this period appears to be decreasing as people remain in their homes for longer, or are admitted to homes for end-of-life care.[9] Assessment and regulatory systems are not always matched to residents' needs, and effective care planning has been identified as one of the most pressing future needs.[7] Thus, evaluation of the impact of the GSFCH programme is relevant from both local and national policy perspectives.

Care homes are increasingly important in the context of end-of-life care. Almost 20% of the population dies in these settings, a figure which rises to 36% in the older than 85 years population.[10] In the decade since Sidell, *et al.*[11] published the first major study of dying in care homes, understanding of the complexities and context of end-of-life care for care home residents has developed. Seymour, *et al.*[10] summarised the issues, which impact upon end-of-life care. Resident factors include the absence of a terminal diagnosis, with over 50% dying due to 'general deterioration', consequently identifying the need for planning end-of-life care may be problematic. Whilst some residents may be admitted in the terminal phase, with little time available for care assessments. Half of the care home managers in one study identified 'late stage' admissions as one of the difficulties in providing palliative care.[12] Organisational factors impacting upon end-of-life care provision include privatisation of the nursing home sector and variable access to staff training.[13] Managers and registered nurses may lack awareness of palliative care principles.[14,15] Medical cover is typically provided by general practitioners and access to specialist palliative care input is variable.[16] Finally, care may be underfunded, which carries implications for the quality of care.[10]

Evaluations of educational programmes to support end-of-life care in nursing homes and to improve palliative care input have provided encouraging results while identifying ongoing challenges.[16,17] The GSFCH phase 2 programme offers one example of introducing an integrated programme for end-of-life care on a national basis.

Developing the GSFCH programme

To initiate the GSFCH programme, the GSFCH development team undertook a pilot project (phase 1) in 12 nursing homes.[18] Findings helped to both refine the programme and to plan its introduction into a larger number of homes, the phase 2 GSFCH evaluated here.

The GSFCH programme consisted of introducing the organisational tool, the GSFCH, support to homes from a local GSFCH facilitator and support by the development team, a helpline and conference calls. Training was provided by the GSFCH team at four national one-day workshops for care home staff, held in the West Midlands, UK. Homes could also access additional staff training, arranged locally by facilitators, which was tailored to the needs identified by individual homes.

The criteria for participation in the programme were as follows: homes that had provided nursing care for older people; that received support from the local SHA; for which a local GSF facilitator was available and that had a satisfactory assessment by the Commission for Social Care Inspectorate (which regulates care homes in England). In addition, as this was the first attempt to undertake a national introduction of GSFCH, managers were asked to participate in the programme evaluation to help inform GSFCH development. This reflected the model of evaluation of the implementation and impact of the use of the GSF in primary care.[19–21]

Care home managers were offered support over the 8 month period of introduction. Workshops were attended by small numbers of staff from each home and staff were guided through the programme's seven 'key tasks', which, if addressed, should result in achievement of the five GSF goals. The key tasks linked to aspects of end-of-life care are communication, co-ordination, control of symptoms, continuity, continued learning, staff and family carer support and care of the dying.[22]

The evaluation

The aim of the study was to evaluate the impact of the introduction of the GSF into care homes. The research framework was based on a modified action research approach, which enabled researchers and developers to work together to evaluate progress of the implementation.[23] The research team introduced the evaluation at the first workshop, and at subsequent workshops, it presented ongoing findings.[24]

Methods

Data collection and analysis

A pre- and post-survey design was used, focusing on a range of indicators identified by the GSF team and others[10] as markers of good practice in end-of-life care. This included key aspects of end-of-life care and a range of organisational issues that were identified in the pilot study as having the potential to impact on GSF uptake.[18]

Baseline and final surveys, completed by homes, enabled identification of changes in practice, which were likely to be associated with the implementation of the GSFCH. To complement the surveys, an After Death Analysis (ADA) form was devised to record details of the five most recent resident deaths to provide a profile of deaths and associated care. The ADA was administered

with the surveys. Data collection commenced in June 2005 and was completed in summer 2006. Participating homes were distributed throughout England, so multi centre NHS research ethics approval was obtained (05/MRE0768).

Data from the surveys and ADA tool were stored and analysed using SPSS (Version 11, SPSS Inc., Chicago, Illinois, USA). Descriptive statistics were used to summarise the key contextual data (e.g., number of beds, number of GP practices liaising with the home), using percentages to show the proportions and median and range as the measures of central tendency and distribution, respectively. Inferential statistical tests were used to examine group differences. Non-parametric tests were used due to evidence of skewness in some of the variables. Differences between those who completed the audit and those who did not were examined using the Mann–Whitney test for ordinal variables and the chi-square test or Fishers Exact test for categorical variables, as appropriate. Comparisons of study variables between baseline and follow-up were made using the Sign test or Wilcoxon signed-rank test for ordinal data and McNemar test for categorical data. The level of significance was set at $P < 0.05$.

Findings

Of the 95 homes that participated in the GSFCH programme, 83 returned survey data at different points (Table 1). The 49 homes that returned data at baseline and final survey (i.e., pre and post the GSFCH programme) form the evaluation sample. A 52% response is high for a longitudinal study in which case losses are an acknowledged problem.[25] However, the key issue for the GSFCH team was the extent to which the response to the surveys reflected uptake of the GSF. Consequently, before reporting the outcomes of the programme, response patterns are analysed to identify whether homes that completed the evaluation differed in any of the baseline indicators from homes that did not complete the evaluation.

Pattern of response

Failure to return the final survey indicates that homes may not have completed implementation of the GSFCH programme in the timescale or may have dropped out. In practical terms, this is not a problem as, once staff have access to the materials and programme support, they can continue implementation of GSFCH at a pace that reflects local issues. However, this poses challenges for programme evaluation, as definitive end points may not be so easily identified. It was also important to consider factors that may differ between these two groups of homes to inform further development work.

Table 1 Homes returning survey data

	N (%)
Homes in the GSFCH programme	95 (100)
Baseline survey returned	79 (83)
Final survey returned	52 (55)
Baseline and final survey returned	49 (52)
Baseline survey returned, but not final survey	30 (32)

GSFCH, Gold Standards Framework for Care Homes.

Comparison between homes completing and not completing the evaluation

Baseline data were necessary for this analysis, so homes that did not return any survey data or only returned subsequent surveys were excluded (Table 1). Baseline data from the 49 homes that completed both baseline and final surveys were compared with data from the 30 homes that returned the baseline but not the final survey. The results of this analysis are shown in Table 2.

Comparison of home ownership, type of home, number of nursing beds did not reveal any statistically significant differences between completers and non-completers, indicating that on these measures, homes in both groups were similar. Sixty-three percent of homes that completed the evaluation and 71% of homes that did not complete were in group ownership ($P = 0.40$); the median number of nursing beds in the homes that completed the evaluation was 35 and 37 in the 'non-completers' ($P = 0.24$).

For a number of other variables, homes that completed the evaluation were more likely to have in place at baseline, elements of end-of-life care, which are identified in GSFCH. These included having a care register for residents in need of end-of-life care and using a handover form routinely to notify 'out-of-hours' GP services of residents who were near the end-of-life; the differences between the two groups on these measures were statistically significant. Homes which did not complete the programme were more likely to report problems accessing daytime GP services ($P = 0.04$) and also had more difficulty accessing out-of-hours services, although this was not statistically significant. The assessment of staff's abilities to address residents' social needs also showed a significant difference between the two groups, with homes which completed the evaluation rating themselves higher at baseline than non-completers ($P = 0.00$).

A higher percentage of homes that completed the evaluation reported good or very good quality of team work, quality of end-of-life care, confidence in caring for residents at the end-of-life and good or very good levels of working with end-of-life specialists, but the differences between completers and non-completers were not statistically significant.

Finally, a proportion of homes that participated in this phase, regardless of whether or not they completed the

Table 2 Baseline comparison of homes: completers and non-completers

Question	Response options	Non-completer % ($n = 30$)	Completer % ($n = 49$)	*P*
Type of care home	Nursing only	41	58	0.149 C
Home has a coordinator for end-of-life care	Yes	31	41	0.388 C
Home has an up to date care register for end-of-life care	Yes	3	21	0.043* F
Routinely discuss advanced care planning with residents?	Yes	60	63	0.772 C
GP services				
Problems accessing daytime GP services?	Yes	29	9	0.047* F
Problems accessing out-of-hours GP services?	Yes	71	56	0.189 C
Handover form sent routinely to out-of-hours GP services?	Yes	0	17	0.022* F
Estimated ability to address residents'				
Physical needs	Very good	43	49	0.493 MW
	Good	47	47	
	Average	10	2	
	Poor	0	2	
	Very poor	0	0	
Emotional needs	Very good	10	19	0.112 MW
	Good	47	54	
	Average	40	25	
	Poor	2	2	
	Very poor	0	0	
Social needs	Very good	3	18	0.005* MW
	Good	43	57	
	Average	47	20	
	Poor	7	4	
	Very poor	0	0	
In relation to end-of-life care rate assess				
Quality of care offered to residents	Very good	10	29	0.174 MW
	Good	57	43	
	Average	30	26	
	Poor	3	2	
	Very poor	0	0	
Quality of support offered to family	Very good	10	20	0.591 MW
	Good	53	43	
	Average	30	31	
	Poor	7	6	
	Very poor	0	0	
Quality of support offered to staff	Very good	7	12	0.540 MW
	Good	40	43	
	Average	50	37	
	Poor	7	8	
	Very poor	0	0	
Does the home: use a protocol for the last days of life?	Yes	33	51	0.140 C

C, chi-square test; F, Fishers Exact test; MW, Mann–Whitney test.
*Significance set at $P < 0.05$.

evaluation, had already adopted some features that are recognised as components of good end-of-life care. These included use of the Liverpool Care Pathway (19% completers; 7% non-completers) and discontinuing inappropriate medication in the last days of life (90% completers; 76% non-completers). There were no significant differences between completers and non-completers on these items, but their adoption indicates that some staff had experience of end-of-life care and/or that homes worked either with GPs with an interest in end-of-life care or with palliative care practitioners.

Pre- and post-GSFCH survey findings

Comparison of quantitative data from the baseline and final surveys reveal the extent to which staff who completed the evaluation and returned data ($n = 49$) felt they had been able to implement elements of the GSFCH (Table 3).

Statistically significant changes are shown in a number of areas. These include the number of homes that post GSFCH, had a care register for end-of-life care, had a coordinator for end-of-life care and routinely undertook advanced care planning.

No statistically significant differences between pre- and post GSFCH were found in the number of homes, which discuss preferred place of care with residents, GPs, families or staff, possibly because these levels were already high at baseline. However, changes were shown in the proportion of homes where staff reported discussing resuscitation plans with residents, families, GPs and staff. At baseline, 23% of homes were discussing such plans with residents, whereas the final survey indicated that 65% were having

Table 3 Comparison of care items at baseline and final survey at homes which completed the evaluation

Question	Response	Baseline % ($n = 49$)	Final % ($n = 49$)	Test result
Home has an up to date register for end-of-life care?	Yes	21	88	0.001* M
Home has a coordinator for end-of-life care?	Yes	41	83	0.001* M
Home routinely undertakes advanced care planning?	Yes	51	77	0.008* M
Do you discuss preferred place of care?				
With residents?	Yes	81	87	0.508 M
With GPs?	Yes	89	84	0.774 M
With family?	Yes	90	98	0.219 M
With staff?	Yes	87	87	
Do you discuss plans for cardiopulmonary resuscitation in the event of cardiac arrest?				
With residents?	Yes	23	65	0.001* M
With GPs?	Yes	42	71	0.004* M
With family?	Yes	38	81	0.001* M
With staff?	Yes	29	74	0.001* M
Rate your home's ability to address residents'				
Physical needs	Very good	49	75	0.007* S
	Good	47	24	
	Average	2	2	
	Poor	2	0	
	Very poor	0	0	
Emotional needs	Very good	19	29	0.170 S
	Good	54	49	
	Average	25	18	
	Poor	2	2	
	Very poor	0	2	
Social needs	Very good	18	37	0.078 S
	Good	57	41	
	Average	20	22	
	Poor	4	0	
	Very poor	0	0	
Spiritual needs	Very good	17	24	0.006* S
	Good	31	49	
	Average	42	26	
	Poor	10	2	
	Very poor	0	0	
Communication				
Do you send handover forms to GP out-of-hours provider?	Yes	17	52	0.001* M
Do you offer information leaflets to family carers?	Yes	27	36	0.344 M
Do you routinely give families information on what to do after a death?	Yes	92	97	0.625 M
Do you have a protocol for the bereaved?	Yes	54	53	1.0 M
In relation to end-of-life care rate				
Quality of care offered to residents	Very good	29	57	0.000* S
	Good	43	35	
	Average	27	4	
	Poor	2	2	
	Very poor	0	0	
Quality of support to family carers	Very good	20	42	0.001* S
	Good	43	52	
	Average	31	6	
	Poor	6	0	
	Very poor	0	0	
Quality of support to staff	Very good	12	24	0.004* S
	Good	43	54	
	Average	37	22	
	Poor	8	0	
	Very poor	0	0	

Statistical tests: M, McNemar test; S, Sign test.
*Significance set at $P < 0.05$.

these discussions ($P = 0.00$). At baseline, the majority of respondents felt the ability of their staff to address residents' physical, emotional and social needs were either good or very good; however, less than half (48%) felt confident that residents' spiritual needs were addressed. Post the GSFCH programme, three quarters of homes reported that the abilities of their staff in this area were good or very good ($P = 0.01$). A significant difference was also demonstrated in respondents' assessments of the ability of their staff to address residents' physical needs, with a number of homes, which rated themselves 'good' at baseline rating themselves as 'very good' at follow up.

Improvements in communication with out-of-hours GP providers were indicated by the percentage of homes that routinely sent handover forms to their out-of-hours provider, a rise from 17 to 52% ($P = 0.00$) during the programme. Providing families with written information and production of protocols for bereavement care showed minimal change; however, the perceived quality of support for both family carers and for staff in the context of end-of-life care showed a significant improvement.

Significant improvements between baseline and final survey were demonstrated in the adoption of a care protocol in the last days of life (51% pre, 78% post), the use of an integrated care pathway (19% pre, 59% post) and adoption of a procedure to arrange prescription of anticipatory medication (e.g., for pain relief), which may be needed to increase comfort at the end-of-life (39% pre, 70% post; $P = 0.00$ for all three items). At baseline, the majority of homes (90%) were already routinely conducting medication reviews for residents approaching end-of-life. This figure increased to 96% on follow up, but was not statistically significant.

Of the 49 homes that completed the evaluation, 70% were represented at the third GSFCH workshop and 75% at the final workshop. Eighty-five percent of final survey respondents stated that staff had accessed end-of-life educational events, in addition to the GSFCH programme, during the study period. No comparative data were available to determine how this may have differed from the norm. However, increased educational input was demonstrated by a significant increase in the number of homes using the Macmillan 'Foundations in Palliative Care' resource for staff training, which is recommended as a resource in the GSFCH programme (18% baseline, 52% final survey, $P = 0.00$).

After Death Analysis

Baseline and final surveys were accompanied by a one-page 'ADA' form designed to focus on residents' end-of-life care. As with the surveys, meaningful analysis of the data required matched returns from the same home. Forty-six homes returned both baseline and final ADA forms. However, two homes had no deaths in the post GSFCH period, leaving 44 matched returns. ADA forms recorded details of the most recent five resident deaths per home. In total, data were provided on 220 resident deaths in the 6-month pre-programme and 217 deaths after implementation (Table 4). In order to carry out statistical tests, a percentage score, based on the grouped item data for each home, was produced for each care item in the ADA, pre- and post-GSFCH. For example, if all five residents had an advanced care plan, the percentage was 100%; if three out of five had a care plan, the percentage was 60% and pro rata. Scores were weighted according to the number of cases returned.

The analysis (Table 4) shows that post-GSFCH, there was a statistically significant change in the percentage of residents who died in the care home. In terms of percentages, prior to the programme 80.9% of residents died in the care home compared with 88.5% at follow-up. This was mainly due to a decrease in the percentage of deaths in hospital. Comparison by home of crisis events and crisis admissions to hospital (items 2 & 3) also demonstrate a

Table 4 After Death Analysis (ADA) pre- and post-GSFCH

No.	Care item	Response		Test result, *P*
		Pre-ADA Median (min, max)	Post-ADA Median (min, max)	
	All resident deaths			
1	Care home is place of death: Median % score for homes (Min–max)	100 (20–100)	100 (20–100)	0.000*
2	No crisis events in 6 months before death: Median % score for homes (Min–max)	60 (0–100)	60 (0–100)	0.033*
3	No crisis admissions in 6 months before death: Median % score for homes (Min–max)	80 (0–100)	80 (20–100)	0.001*
	Residents who died in the care home			
4	Advanced care plan in place: Median % score for homes (Min–max)	20 (0–100)	67 (0–100)	0.001*
5	Access to as required medication: Median % score for homes (Min–max)	60 (0–100)	60 (0–100)	0.011*
6	Last days of life care pathway: Median % score for homes (Min–max)	0 (0-100)	50 (0-100)	0.001*
7	Written information to family: Median % score for homes (Min–max)	0 (0–100)	60 (0–100)	0.001*

$N = 44$ homes.
Statistical test: Wilcoxon signed-rank test.
Statistical tests conducted on the home as the unit of analysis.
*Significance set at $P < 0.05$.
GSFCH, Gold Standards Framework for Care Homes.

statistically significant decrease in both measures. Of the residents who died in the 6 months before the programme 37.8% had a crisis admission to hospital in the previous 6 months, whereas post-programme the figure was 26.3%. Analysis of care items 4–7 indicated implementation by some homes of features of the GSFCH. All four care items, advanced care plans, access to 'as required' medication at the end-of-life, last days of life care pathways and written information provided for families, showed a statistically significant improvement between baseline and follow up.

Discussion

Analysis of the pre- and post-programme quantitative survey and the ADA data indicate that the GSFCH is capable of making a positive impact on of end-of-life care in participating care homes. In particular, there were significant improvements in processes to identify and address the needs of residents with end-of-life care needs, and there was more discussion about residents' care preferences. For residents, this resulted in a reduction in the number of crisis admissions to hospital and a significant increase in the percentage of residents who died in a care home rather than hospital. The survey response rate of 52% at follow up gives confidence in the findings.

Limitations

This was the first national implementation of the GSFCH programme, and the risk of the Hawthorne effect was high.[26] Some homes were reviewing practice continually as part of the normal cycle of quality improvement. The challenges of maintaining a good response rate from control sites would have presented considerable practical difficulties; so for pragmatic reasons, no control group was included.

In terms of administration, the research team was not in a position to request that the pre- and post-survey tools were completed by the same individual. The ADA forms were subject to the same limitation, but as they focused on, specific cases the pro-forma offered an objective tool that has the potential to give clear outcome measures, compared with asking about usual or routine care, which may not apply in all cases. Finally, the care items in the ADA constitute proxy indicators of the quality of end-of-life care. It is assumed that if these are in place, the likelihood of residents' experiencing a better quality of care is enhanced, but this cannot be confirmed.

It is possible that at the outset, participating homes were already motivated towards, and in a position to provide, quality end-of-life care. The comparison of homes, which completed and did not complete the evaluation indicated few significant differences between the two groups, but the finding that homes, which completed the evaluation were significantly less likely to report difficulties in aspects of communication with GP services may indicate that this is a factor influencing the ability of homes to implement the programme. The analysis of process indicators from the survey data shows progression in developing end-of-life care practices over the course of this evaluation, indicating that these developments were a consequence of homes' participation in the GSFCH programme, rather than other factors. These findings demonstrate that staff were drawing on all aspects of the GSFCH programme, consequently residents were more likely to receive planned, agreed and better quality end-of-life care in line with their wishes. Findings from the qualitative phase of the evaluation reveal that staff attributed these changes in their approach to end-of-life care to the GSFCH programme.[24]

Evaluation of the impact of the programme on end-of-life care

The findings reveal that the programme resulted in improved processes for delivering end-of-life care. At follow-up, there were significant changes in the proportions of homes that had systems for identifying residents in need of end-of-life care, had care coordinators and were routinely undertaking advanced care planning. There was minimal change in the proportion of homes undertaking discussions about preferred place of care, however these were high at baseline.

Statistically significant changes were not found in all aspects of care which were evaluated. There appeared to be a tendency towards successful implementation of the aspects of the GSFCH programme, which were covered in the first workshops and reinforced in third and fourth workshops, possibly because managers and coordinators had more time to embed these into practice. Aspects of care relating to residents' families were mainly covered in workshops three and four, so homes had less time to implement these elements (e.g., information leaflets for families) before the follow-up survey.

The potential impact of the GSFCH programme on residents' end-of-life care is demonstrated in the findings from the ADA analysis, which indicate that following the programme, significantly more residents were dying in care homes and fewer in hospital. There was also a statistically significant reduction in 'crisis' admissions to hospital in residents' last 6 months of life. These are all important measures that can be used as outcomes to determine whether a successful model of end-of-life care is in place.[27] There is the potential for every admission to hospital to be distressing for the person concerned. For elderly people admitted from care homes such distress can be exacerbated in an 'end-of-life' situation.[28] The outcome

of enabling people to die where they choose is clearly one to aspire to and is endorsed in policy.[1] Resident deaths following an emergency transfer to hospital may also be distressing for staff, who may feel that they had not done enough to prevent the transfer, and sadness that residents died in unfamiliar surroundings.[9] A related policy concern is the cost of emergency hospital admissions and care. There is less call on resources if emergency admissions from care homes can be prevented by skilling up care homes to provide end-of-life care. Hence, there is an economic case, as well as a humanitarian one, for developing models of optimal end-of-life care in nursing homes.

In addition, the ADA tool offers a means of monitoring the impact of a programme such as the GSFCH. With its focus on individual cases, the tool provides a more accurate indicator of the quality of care than more general survey questions seeking indications of 'usual care' which staff perceive they provide, but which may not be applied to all residents.

Although the indications are that implementation of the GSFCH, rather than other factors, produced the reduction in resident deaths in hospital, it is uncertain which elements of the programme contributed to this change. Most likely, the changes were produced by a combination of factors including, for example, more discussion with residents and families about care towards the end-of-life, improved communication with GP out-of-hours services, introduction of procedures for anticipatory medication and greater staff confidence in caring for people at the end-of-life. The GSFCH programme is one of a small number of initiatives designed with the aim of improving the quality of end-of-life care in care homes.[12,16,17] The limited number of initiatives in this area may be considered surprising, given that one in five of the population dies in a care home and may be related to the relatively hidden nature of care homes, their separateness from the NHS, issues of funding and discrimination of residents on the basis of both age and disease. Although most end-of-life care is provided by generalists, a recent review of the literature concluded that their roles were poorly researched and that research was focussed on current needs. There were few evaluation studies and the evidence base for practice was sparse.[29] This evaluation of the GSFCH makes a contribution to this under developed evidence base.

Nursing homes may be regarded as places where the medicalisation of dying, characterised by interventions to prolong life, can be resisted,[30] however the goal of a 'good death' is only possible if care home staff and collaborating generalist practitioners are competent and confident in their end-of-life care skills and knowledge. Research reveals though that both nursing home and hospital staff feel that they do not have sufficient knowledge of end-of-life care.[15,31,32] Specialist practitioners in palliative care may be regarded as appropriate trainers for care homes, but they may have educational needs if they are less familiar with the context of care homes or the long term conditions from which residents are likely to die.[16] Shemmings[9] notes that within care homes, those dealing with death the most, the care staff, are often the least trained. Although training and support for care staff are needed, Shemmings cautions that the emphasis on training for end-of-life care may be regarded as reaffirming 'society's fears about death and reinforcing its unnaturalness'. However, training programmes specifically for nursing home staff have demonstrated potential to promote a greater openness about death and dying, improved practice and better staff teamwork,[17] and support and advice for care homes are recommended as a means of reducing the proportion of care home residents who die in hospital.[33] However, supporting end-of-life care in care homes also requires understanding and consideration of wider health care policy and the contextual factors that impact upon care homes' capacity to provide holistic care for older people.[34]

Regardless of the type of care home ownership, participation in this programme (although not travel to the workshops) was funded by the NHS. This signifies a change in the relationship between the NHS and the care home sector, which in the past has been interpreted by some as having a negative impact upon care homes.[35] Some NHS trusts and voluntary hospices charge care homes for staff training, whereas homes in other areas can access similar training free of charge.[24] However, care home residents are also entitled to NHS services, and this inequity in access to staff training in end-of-life care needs to be addressed urgently. If end-of-life care is to be truly seen as a public health issue, and people living in nursing homes are not to suffer discrimination, all practitioners need equal access to training.[36] Deficiencies in care of the dying is a common theme in complaints about the NHS[37] indicating that programmes of this type can potentially have wider benefits. The outcomes of the GSFCH programme reported in this study represent a snapshot in time and ideally should be considered alongside evaluation of subsequent phases of the GSFCH. Finally, in addition to the initial programme, systems are necessary to ensure that learning from the programme remains relevant to practice and is embedded in the organisation. Continuing dissemination of emerging research findings and their relevance and practical application to care homes must also be considered.

Conclusion

Evaluation showed that implementation of the GSFCH programme made a positive difference to care processes and outcomes for residents nearing the end-of-life. These

findings contribute towards the evidence base for the impact of the GSF programme in care homes. The positive impact of the programme demonstrated in this study indicates that wider uptake and evaluation across the sector would be beneficial to residents and their families. Further evaluation of the impact of the GSFCH programme is needed, and this will require a focus on developing evaluative tools based on the model developed for the ADA. The promising trends identified in this study are a positive development that warrants further enquiry, as the GSFCH programme is rolled out nationally.

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