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QUALITATIVE PAPER

A realist evaluation of a multifactorial falls prevention programme in care homes

Paul A. Leighton[1], Janet Darby[2], Frances Allen[2], Marie Cook[3], Rachel Evley[2], Chris Fox[4,5], Maureen Godfrey[6], Adam Gordon[2], John Gladman[2,7,8,9], Jane Horne[2], Kate Robertson[10], Pip Logan[2]

[1]Lifespan and Population Health, School of Medicine (LPH), University of Nottingham, Nottingham UK
[2]Injury, Recovery and Inflammation Sciences (IRIS), School of Medicine, University of Nottingham, Nottingham UK
[3]College of Health and Psychology, University of Derby, Derby UK
[4]College of Medicine and Health, University of Exeter, Exeter UK
[5]Norfolk and Suffolk NHS Foundation Trust, Norwich UK
[6]Public Contributor
[7]Nottingham University Hospitals NHS Trust, Nottingham UK
[8]NIHR Nottingham Biomedical Research Centre, Queens Medical Centre, Nottingham UK
[9]NIHR Applied Research Collaboration East Midlands (ARC-EM), Nottingham UK
[10]Nottinghamshire Healthcare NHS Foundation Trust, Nottingham UK

Address correspondence to: Paul A. Leighton, School of Medicine, University of Nottingham, Applied Health Research Building (Building number 42), Nottingham, NG7 2RD, UK. Email: paul.leighton@nottingham.ac.uk

Abstract

Background: falls in care homes are common, costly and hard to prevent.
Multifactorial falls programmes demonstrate clinical and cost-effectiveness, but the heterogeneity of the care home sector is a barrier to their implementation. A fuller appreciation of the relationship between care home context and falls programme delivery will guide development and support implementation.
Methods: this is a multi-method process evaluation informed by a realist approach.
Data include fidelity observations, stakeholder interviews, focus groups, documentary review and falls-rate data. Thematic analysis of qualitative data and descriptive statistics are synthesised to generate care home case studies.
Results: data were collected in six care homes where a falls programme was trialled. Forty-four interviews and 11 focus groups complemented observations and document review.
The impact of the programme varied. Five factors were identified: (i) prior practice and (ii) training may inhibit new ways of working; (iii) some staff may be reluctant to take responsibility for falls; (iv) some may feel that residents living with dementia cannot be prevented from falling; and, (v) changes to management may disturb local innovation. In some care homes, training and improved awareness generated a reduction in falls without formal assessments being carried out.
Conclusions: different aspects of the falls programme sparked different mechanisms in different settings, with differing impact upon falls.
The evaluation has shown that elements of a multifactorial falls programme can work independently of each other and that it is the local context (and local challenges faced), which should shape how a falls programme is implemented.

Keywords: care homes, falls prevention, realist evaluation, qualitative research, older people

Key Points

- Falls management programmes may impact differently in different care homes.
- Falls management programmes may trigger different mechanisms in different settings.
- Understanding local context is imperative when planning implementation in care homes.

Introduction

The Guide to Action in Care Homes programme (GtACH) is a multi-factorial falls prevention programme for care homes (1, 2). It comprises a paper-based falls risk assessment and decision support aid (the *GtACH tool*); staff training; a reference manual; and a falls awareness poster. The GtACH programme also demarcates two distinct staff roles: a Falls Champion located within each care home to support local practice and a regional Falls Lead offering expert support in falls risk management (Appendix 1 available online provides more detail about GtACH). The Falls in Care Homes (FinCH) randomised controlled trial has demonstrated that the GtACH programme both reduces the number of resident falls and is cost-effective (3, 4). The findings of FinCH support the broad implementation of the GtACH programme, whilst recognising that 'the intervention and its implementation would almost certainly require adaptation to take account of the different ways that long-term care facilities are configured' (3, 4).

This realist evaluation, undertaken parallel to the FinCH trial, will support the future implementation of the GtACH programme. It will also provide insight into those general factors and characteristics which inhibit or enable the delivery of complex interventions in care homes. Care homes pose distinct challenges for implementation: they vary in size, funding, workforce and culture. This heterogeneity of organisational context is an inherent barrier to effective innovation (5–13) which challenges the assumption that complex interventions (such as GtACH) are easily translatable from one care setting to another.

Consistent with the realist method, and RAMESES II reporting guidelines (14), we start with the initial programme theories which underpin a complex intervention. These programme theories map how GtACH is intended to work in ideal circumstances. They are derived from previous published work about GtACH (1, 2, 15) and were verified by the creators of the GtACH programme and the FinCH Trial Management Group (February 2017).

GtACH is premised on two general principles: that falls risks are better managed when they are identified and specifically rectified (rather than simply quantified); and, that care home staff may benefit from training and peer support in managing falls. Figure 1 provides a fuller development of these ideas.

A realist approach considers how these programme theories translate into practice, hypothesising that they will have different relevance and impact in different settings (16–19). A realist stance speculates that the actual mechanisms of change will vary in different contexts (more information on the realist method can be found in Appendix 2—available online).

The aims of this work are to identify those contexts where GtACH is easily adopted and recognise those mechanisms that lead to positive outcomes, specifically considering fidelity with training and delivery, acceptability to stakeholders and impact upon falls rate.

Methods

This was a multi-method process evaluation run concurrently with (but independently from) the FinCH trial. It was informed by the principles of realist evaluation (16–19) and was characterised by considering the adequacy of the programme theories described above in different care settings. The evaluation incorporated several distinct but interrelated stages: (i) the formulation of initial programme theories; (ii) theoretical sampling to support testing of these theories in specific contexts; (iii) data collection and analysis to build site specific programme theory variations and (iv) identification of recurrent patterns in these variations (known as demi-regularities in realist research).

Settings and participants

Care homes were purposively selected (20) from the 39 settings randomised to implement the GtACH programme in the UK FinCH trial. Contextual factors hypothesised as potentially important in the delivery of the GtACH programme informed sampling (e.g. size of care, ownership, staff constitution, etc.).

In each setting, the manager, all staff who received the GtACH training, all staff that delivered the training and those residents judged by care home staff to have capacity to provide consent were approached to take part in the evaluation.

Data collection

A combination of fidelity observations, focus groups, interviews, GtACH tool review and falls-rate data built a detailed case study of each care home. Data were primarily collected at two time points: in the 3 months following training delivery, and then at 6 months post-training.

A fidelity checklist was used to assess GtACH training and use of the *GtACH tool*.

Care home staff were asked to reflect upon their experience of the training and their expectations of the GtACH programme in focus groups which followed the training. They were later asked to reflect upon their experiences of the programme during a focus group held at the 6-month return visit.

In addition, managers, staff, Falls Champion and the regional Falls Lead were invited to consider the local experience of the GtACH programme in semi-structured, qualitative interviews. Residents were asked about their experience of the GtACH assessment (interview and focus group topic guides can be found in Appendix 3—available online).

In each care setting, the incidence of falls during the evaluation period was recorded.

Data analysis

Focus group and interview data were digitally recorded, transcribed in full and anonymised. Data were handled using the NVivo software package (v.12) (21) and analysed

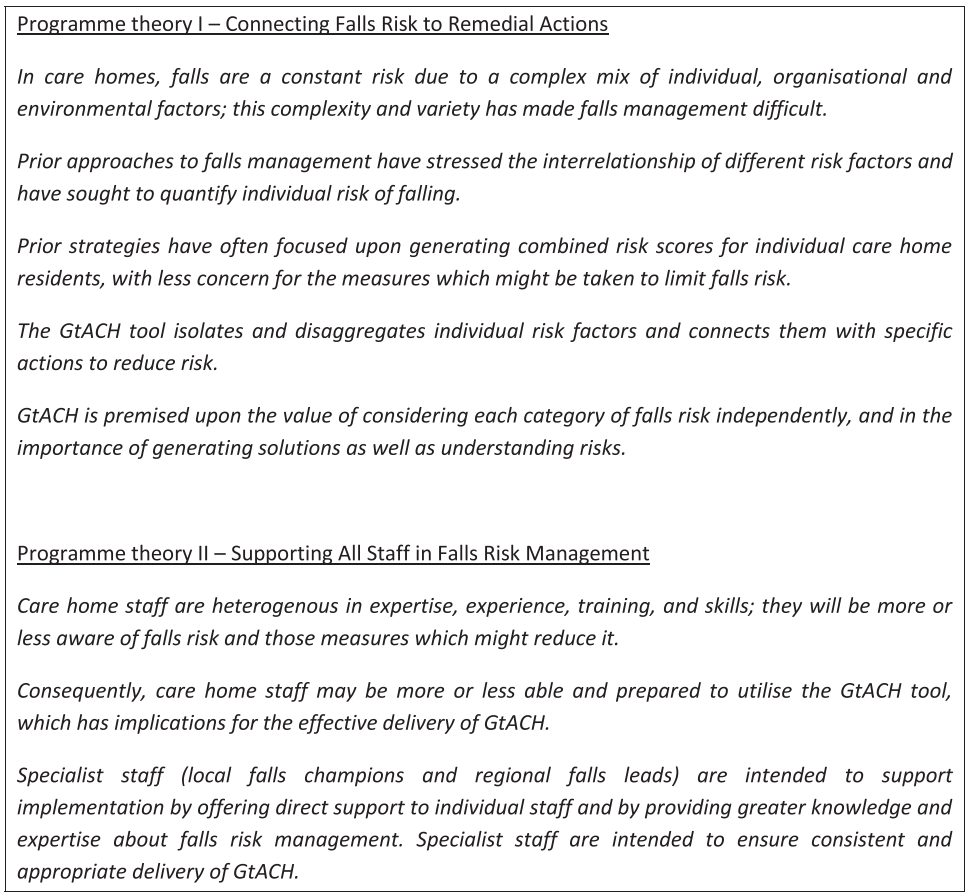

Figure 1. GtACH programme theories. Programme theory 1—Connecting Falls Risk to Remedial Actions In care homes, falls are a constant risk due to a complex mix of individual, organisational and environmental factors; this complexity and variety has made falls management difficult. Prior approaches to falls management have stressed the interrelationship of different risk factors and have sought to quantify individual risk of falling. Prior strategies have often focused upon generating combined risk scores for individual care home residents, with less concern for the measures which might be taken to limit falls risk. The GtACH tool isolates and disaggregates individual risk factors and connects them with specific actions to reduce risk. GtACH is premised upon the value of considering each category of falls risk independently, and in the importance of generating solutions as well as understanding risks. Programme theory 2—Supporting All Staff in Falls Risk Management Care home staff are heterogeneous in expertise, experience, training and skills; they will be more or less aware of falls risk and those measures which might reduce it. Consequently, care home staff may be more or less able and prepared to utilise the GtACH tool, which has implications for the effective delivery of GtACH. Specialist staff (local Falls Champions and regional Falls Leads) are intended to support implementation by offering direct support to individual staff and by providing greater knowledge and expertise about falls risk management. Specialist staff are intended to ensure consistent and appropriate delivery of GtACH.

thematically (22, 23). Focus group and interview data were combined in analysis.

Descriptive statistics were generated for the GtACH tool use fidelity checks—fidelity Y/N for six attributes. Descriptive statistics were generated for local falls data—a count of falls during the baseline and primary outcome periods.

In accordance with the realist method, data were synthesised in the form of multiple *Context-Mechanism-Outcome* (C-M-O) configurations that reflect local variations in the utility of the programme theories (see Table 1).

In this evaluation, we consider *context* and *outcome* as fixed, with *mechanism* ascribed the causal power to explain why/how specific *outcomes* emerge in specific *contexts*. Identifying recurrent patterns in these C-M-O configurations aids identification of those *contexts* and *mechanisms* that support the implementation of the GtACH programme.

NRES Committee Yorkshire and Humber—Bradford Leeds REC (Ethics reference 16/YH/0111) approved this study.

Results

Data were collected in six care homes—ranging in size, including both residential and nursing homes, and demonstrating different models of ownership and management (Table 2).

Table 1. Modelling CMO configurations

Contexts	Mechanism	Outcome
Defn. Description of the setting where the GtACH programme is introduced.	**Defn.** Local reaction/response to the GtACH programme which informs changes to practice.	**Defn**. Impact of the GtACH programme in falls management process or incidence.
Evaluation data:	**Evaluation data:**	**Evaluation data:**
• Baseline demographics about care home and staff. • Baseline falls data. • Existing falls practice described in interviews and focus groups.	• Individual reasoning about falls as described in interviews and focus groups—this could be knowledge, awareness, confidence, etc. • Organisational response to falls as established in documentary review. • Organisational response to falls as described in interviews and focus groups—this could be awareness, priority, culture, etc.	• Post-intervention falls data. • Training/tool fidelity. • Acceptability of GtACH as described in interviews and focus groups. • Altered/new practice as described in interviews and focus groups.

Table 2. Care homes and participants in process evaluation

Home	Size (residents recruited to trial)	Home ownership	Registered care categories	Number of focus groups	Number of staff interviews	Trial data—change in number of falls (primary data period vs baseline. period)	Trial data - change in falls rate (primary data period vs. baseline period)
A	71 beds (18)	Corporate: Provision of care across 66 settings	Residential dementia	4	7	+7	+5.04
B	48 beds (16)	Small chain: Provision of care across 4 settings	Nursing dementia	2	1	-2	-0.68
C	46 beds (24)	Charitable: Provision of care across 4 settings	Residential dementia sensory impairments	2	10	+6	+3.43
D	40 beds (10)	Corporate: Provision of care in over 100 care settings	Residential dementia	1	10	+8	+9.32
E	17 beds (12)	Independent: Care provided in a single care setting	Residential	0	8	−6	-5.3
F	53 beds (42)	Small chain: Provision of care across 7 settings	Residential dementia	2	8	+8	+3.74

Across these settings, 88 people consented to participate in the evaluation: 7 managers, 4 deputy managers, 1 care home employed nurse, 3 Falls Champions, 1 unit manager, 22 senior caring staff, 38 caring staff, 6 residents and 6 Falls Leads. Forty-four interviews took place and 11 focus groups (focus group details are available online as Appendix 4).

GtACH training was observed in five settings; the use of the *GtACH tool* was observed in four settings.

There were 194 independent codes generated from the interview and focus group data. These were organised within a simple thematic structure (consisting of 14 broad themes) which reflect a pragmatic concern for delivering GtACH. Themes include *the paper-based checklist, the Falls Champion, GtACH training, GtACH implementation*, etc. (the code book is available online as Appendix 5).

The incidence of falls

Table 2 also highlights changes in the number of falls and falls rate (falls per 1,000 resident days) before and after GtACH introduction. This shows that falls decreased in settings B and E and increased at a slower rate than no intervention in settings C and F (falls rate increased by 4.53 falls/1,000 resident days in the FinCH control arm). More detail can be found in Appendix 6 (available online).

Local implementation of the GtACH programme

More than 70 CMO configurations were generated to describe the local delivery of the GtACH programme (Appendix 7—available online). Table 3 shows selected CMO configurations that demonstrate localised variations in how/how well the underpinning programme theories were realised. The following commentary describes the experience of each location.

Setting A—falls rate increased

GtACH programme in use

GtACH training was delivered in accordance with the training guidelines but implementation of the *GtACH tool* was poor (only 6 *GtACH tools* were completed for the

Table 3. CMO' s for six care homes

Contexts	Mechanism	Outcome
Care home A		
Knowledgeable staff and existing falls system in place	Little motivation for change	Persistence of existing practice
Demarcation of staff roles in falls management—not all staff manage falls	Inflexibility in job roles	Persistence of existing practice—falls champion role not adopted
Existing administrative/paperwork burden	Little appetite for more paperwork	Persistence of existing practice – *GtACH tool* not adopted
Internal and external management systems	Change processes not owned locally	Persistence of existing practice—change requires corporate approval
A high proportion of residents with dementia, and a consequent greater than average risk of falls	Staff accepting that residents with dementia will fall, and so not motivated to introduce change	Persistence of existing practice—falls rate does not decrease
Care home B		
Contexts	**Mechanism**	**Outcome**
Existing administrative/paperwork burden	Reluctance to introduce additional burden	Persistence of existing practice—*GtACH tool* explicitly not adopted
Nursing staff as part of the care home team	Nurses take ownership and lead falls awareness initiative	Changes to existing practice—all staff encouraged/supported to take part in falls risk management
Demarcation of staff roles in falls management—not all staff manage falls	Cascade of falls risk information (from training) to all staff	Changes to existing practice—broader range of staff engaged in falls management activities
Demarcation of staff roles in falls management—not all staff manage falls	Cascade of falls risk information (from training) to all staff	Changes to existing practice—broader range of staff confident about falls management
Demarcation of staff roles in falls management—not all staff manage falls	Shared responsibility for falls recognised across a broader group of staff	Changes to existing practice—staff more proactive in identifying and responding to falls risks
Care home C		
Contexts	**Mechanism**	**Outcome**
Falls systems in place—staff working at capacity	No appetite for practice change	Persistence of existing practice—*GtACH tool* not adopted
Existing administrative/paperwork burden—staff working at capacity	No appetite for more paperwork	Persistence of existing practice—*GtACH tool* not adopted
Demarcation of staff roles in falls management—not all staff *manage falls*	[Some] staff anxious about completing paperwork	Persistence of existing practice—*GtACH tool* not adopted
External management systems	Change process not owned locally	Long-term adoption of GtACH unlikely
A high proportion of residents with a greater than average risk of falls (residents who are visually impaired and/or with dementia)	Staff accepting that residents will fall, and so not motivated to introduce change	Persistence of existing practice—falls rate does not decrease
Care home D		
Contexts	**Mechanism**	**Outcome**
Falls systems in place—staff working at capacity	No appetite for practice change	Persistence of existing practice—*GtACH tool* not adopted
External management systems	Change process not owned locally	Long-term adoption of GtACH unlikely
Demarcation of staff roles in falls management—not all staff *manage falls*	Staff reluctant about taking on new responsibilities	Persistence of existing practice—*GtACH tool* not adopted
Demarcation of staff roles in falls management—not all staff *manage falls*	Staff anxious about completing paperwork	Persistence of existing practice—*GtACH tool* not adopted
Knowledgeable staff who had received internal training on falls prevention	No motivation to change paperwork or systems	Persistence of existing practice—*GtACH tool* not adopted
A high proportion of residents with dementia, and a consequent greater than average risk of falls	Staff accepting that residents with dementia will fall, and so not motivated to introduce change	Persistence of existing practice—falls rate does not decrease
Care home E		
Contexts	**Mechanism**	**Outcome**
Independent residents. Few with dementia	Lack of perceived need for change	Persistence of existing practice—*GtACH tool* not adopted
Independent residents. Few with dementia	GtACH tool considered inappropriate	Persistence of existing practice—*GtACH tool* not adopted
Demarcation of staff roles in falls management – not all staff *manage falls*	Staff anxious about completing paperwork	Persistence of existing practice—*GtACH tool* not adopted

(continued)

Table 3. Continued

Staff know the residents well	Lack of motivation to adopt a tool which duplicates, rather than adds information, about residents	Persistence of existing practice—*GtACH tool* not adopted
A staff group who have received limited prior training in falls risk management	GtACH training brings improved knowledge about falls risks	Staff more engaged in falls management activities
A staff group who have received limited prior training in falls risk management	GtACH training brings improved confidence in dealing with falls risk	Staff more engaged in falls management activities
Care home F		
Contexts	**Mechanism**	**Outcome**
Frequent changes in management impacting on working practices in the home	Lack of staff ownership with documentation	Persistence of existing practice—GtACH will only be adopted if there is management ownership
Demarcation of staff roles in falls management—not all staff *manage falls*	Staff anxious about completing paperwork	Persistence of existing practice—*GtACH tool* not adopted
Demarcation of staff roles in falls management—not all staff *manage falls*	Staff reluctant about taking on new responsibilities	Persistence of existing practice—*GtACH tool* not adopted
The Falls Lead was not trained alongside the other Falls Leads, and weaknesses were identified with the training	Lack of confidence to use the GtACH following training	Persistence of existing practice—*GtACH tool* not adopted
A staff group who have received limited prior training in falls risk management	GtACH training brings improved knowledge about falls risks	Staff more engaged in falls management activities
A high proportion of residents with dementia, and a consequent greater than average risk of falls	Staff accepting that residents with dementia will fall, and so not motivated to introduce change	Persistence of existing practice—falls rate does not decrease

18 recruited participants). Only senior staff used the *tool* correctly (fidelity of tool use data is included in Appendix 8 online). Care home staff used the *tool* only when observed by study researchers, and on these occasions did not complete it. The *GtACH tool* was not being used at the 6 months return visit.

Impact on practice

The staff reported that falls prevention was well established before the study, and that staff felt knowledgeable and confident about falls management. Staff were reluctant to adopt new ways of working alongside their existing systems. Managerial changes during the study meant that change was neither driven by senior managers nor by care staff. The care home did not instigate the Falls Champion role.

Setting B—falls rate decreased

GtACH programme in use

The GtACH training was delivered in accordance with the training guidelines, but again implementation fidelity was poor. *GtACH tool*s were only completed by one member of staff and then only in anticipation of an evaluation visit. The *GtACH tool* was not used after the initial observation period.

Impact on practice

A new manager was reluctant to introduce new systems at a time of change. The new manager would not sanction additional paperwork alongside the care home's existing system and processes. In contrast, the GtACH training was well received and valued by staff and management alike. Staff described feeling more aware of falls risk and more confident in addressing them; management described changes to staff behaviour with staff becoming more pro-active in falls management.

Setting C—falls rate stable

GtACH programme in use

Training was delivered according to the training guidelines. Twenty-four *GtACH tool*s were completed during the observation period—although most of these ($n = 14$) were completed when researchers were present. Few of those observed were correctly completed. It was considered unlikely that the *GtACH tool* would be continued after the study.

Impact on practice

An enthusiastic Falls Champion involved all grades of staff in the GtACH, and staff reported that it was more in-depth than their own documentation. Despite (because of?) this, care staff in this setting were uncomfortable and lacked confidence when faced with the *GtACH tool*. Some staff did not consider 'paperwork' to be part of their job and they were anxious about their ability to complete the assessment correctly. Longer term it was felt unlikely that the *GtACH tool* would be used as any change in paperwork had to be adopted by all homes in the chain.

Setting D—falls rate increased

GtACH programme in use

Training was delivered in accordance with the GtACH training guidelines, but implementation fidelity was poor. Only one observation was completed due to cancelled visits and fidelity was assessed via filed *GtACH tool*s—in all cases this

was judged to be poor. The GtACH *tool* was not continued post study.

Impact on practice

This care home was part of a very large national chain. The manager had previously worked as the Falls Awareness Trainer for the chain and had trained the staff in falls prevention. Staff felt knowledgeable and confident in falls management. It was reported that most falls occurred in the evenings and that this may be attributed to increased confusion because of dementia. The staff perceived the GtACH *tool* as a useful prompt but felt that it could not be used as a standalone assessment without the entire chain changing practice and procedures.

Setting E—falls rate decreased

GtACH programme in use

Training was delivered in accordance with the GtACH training guidelines. Implementation fidelity was poor—three *GtACH tool*s were completed during the observation period, none were judged to have met fidelity. It was reported that it would be unlikely that the *GtACH tool* would be continued post study.

Impact on practice

In contrast to other settings, residents were more physically able and independent in their day-to-day lives, some residents were observed to walk around a local park. This setting was not registered for dementia care. Few of the residents were at high risk of falling, and consequently the *GtACH tool* was not considered appropriate for the residents' needs.

This independent care home had only previously received in-house falls prevention training and the training provided as part of FinCH was received with enthusiasm.

Setting F—falls rate stable

GtACH programme in use

It was not possible to observe the GtACH training in this setting and some negative feedback about it was subsequently received (training was shorter than the scheduled hour and was delivered in an *unenthusiastic manner*). The *GtACH tool* was not inserted into residents' notes until the end of the evaluation period and consequently the implementation of the assessments could not be observed.

Impact on practice

There was a change of management during the research, with the interim manager having little knowledge of the FinCH study. This meant that the Falls Champion role was not adopted and the implementation of GtACH was delayed. Previous training in this facility had been limited to in-house training and staff were keen to attend falls awareness training. There was however a lack of confidence around completing the *GtACH tool*.

Recurring patterns (demi-regularities)

Five recurring patterns were identified across the six settings. These patterns point to factors pertinent to the contextual fulfilment of the GtACH programme and those mechanisms that are locally triggered by GtACH.

(i) The relevance of prior practice

In accordance with programme theory 1 staff generally recognised the value of identifying and rectifying falls risks, but many felt that existing systems already achieved this without the need for new forms to complete.

> I don't think I'd feel any better or, I don't feel I'd do my job any better filling this [*GtACH tool*] in every time. The form we've got is adequate. (Senior Carer—setting E)

Staff pointed to capacity issues and to the duplication of tasks as discouraging use of the *GtACH tool*:

> It'd be the time element; we wouldn't be able to fill one out three times because it'd be three times for the same thing. We wouldn't have the time to do that because we've already got the action tools to fill out, then we've got the twenty-four-hour obs to fill out. Erm, so realistically, you know, we wouldn't be filling that out. (Carer—setting A)

(ii) The relevance of training

Despite not encouraging broad use of the *GtACH tool,* training was viewed positively, and staff recognised that its benefits are distinct from use of the *GtACH tool*:

> '. . . I liked the training. It was a refresher for myself and the other qualified [staff] . . . I think, again, it made us look a bit beyond what, why, you know, what medication are they on, have they got an infection? I think we pretty much do that anyway. But there was factors on there that I perhaps didn't think of myself. You know because it does tell you through the list of other things to look for. I think, we have struggled filling the paperwork in but the knowledge has stayed in our head. I don't know if that's the right or wrong thing to say but the knowledge is certainly there and we do talk and look at why people are falling, but I think some of the care staff struggled with the paperwork. (Falls Champion—setting B)

Training was considered beneficial in those settings where prior training had been lacking (E and F) and in those settings where parts of the staff group had not previously managed falls (such as B). In these settings, training generated greater knowledge and confidence about falls management, and more acceptance of shared responsibility for managing residents' falls.

(iii) Staff roles

In advocating that all staff take responsibility for falls the introduction of the GtACH programme potentially changes staff role and duties. With the provision of training and the support of all staff grades (programme theory 2), such changes were acceptable. This process is more effectively cemented where local staff take ownership of the GtACH programme and support its use. In setting B, nursing staff acted as advocates for the GtACH programme, encouraging staff to be proactive in observing and reporting falls risks. In

setting C, the Falls Champion sought to engage all staff in its use:

> . . . because the carers care for the people, and they know them more than what we probably do, and what their daily living is, that's why we're getting involved with the carers with this as well . . . . (Falls Champion—setting C)

Where less experienced staff were willing to become more involved in managing falls, they sometimes made a distinction between providing care and completing paperwork. Anxiety about completing paperwork was communicated in all settings and many carers felt that completing *formal records* was beyond their level of qualification and experience:

> I think is better for someone who is more . . . higher from me. I am not confident with fill this everything. I think is better job for them, and I think, because, exactly, they have better contact with GP, doctors, everything. They know more better about like, some forms, documents, I mean. (Carer—setting A)

(iv) Residents with dementia

Both the presence and absence of residents living with dementia undermined the perceived utility of the *GtACH tool*.

In settings A, D and C (with residents who have dementia and/or are visually impaired), falls were considered an inevitable consequence of residents' health. Implementing the *GtACH tool* could not change this underlying factor and was thus considered to be of little value.

> . . . it's silly questions to me because I know the gentleman has got, probably, the end journey of dementia, he's not going to be able to tell us, you know. He knows, if he gets up, he's not aware of what's around him, you know, and you're asking me these questions where I'm thinking, Oh my God, you know, you lot, you know, people, whatever, you know, I know him that well, he doesn't acknowledge what time of day it is, what's around him or anything, you're asking me these quest[ions] - it just doesn't help. (Carer—setting C)

In contrast, different circumstances in setting E led staff to make a similar assessment, in this case because no resident displayed a constant and significant risk of falling.

> . . . even though we're relatively small as care homes go, we do have quite a lot of able-bodied residents, at least half or so, with capacity, so they make their own decisions around their own risks . . . [Residents] take their own risks . . . we train the staff to, to support residents to explain what the risks are, but actually . . . allow them to make that decision. (Care Home manager—setting E)

(v) Facility ownership and management.

The influence of external management systems (i.e. part of a broader chain) potentially inhibits the freedom with which a care home might adapt its local practice. All bar one of the settings evaluated here were part of broader systems.

> if we want to change anything or do anything, we have to do it as an organisation. So it would not be sort of, if you like, correct for us to suddenly stop using what we already use, and to take on board a different tool, unless we could get that tool approved for the rest of the organisation, particularly around falls and falls prevention. (Manager—setting C)

Where staff were required to continue using organisational falls management systems they were less motivated to use the GtACH tool:

> I know that the seniors think that it's a lot . . . because they're having to fill two lots of documentation in at the moment, they sort of do pull a face and say 'Oh, I've got another one to fill in' . . . more document, paperwork. (Manager—setting D)

Changes to management during the evaluation also jeopardised the GtACH programme, with new or short-term managers unsure about implementing it whilst getting to know the care home.

Discussion

Key findings

The views of staff and managers support the programme theories that underpin the GtACH programme, but local circumstances were influential in the extent to which they were fully implemented. In this, it is pertinent to reflect that elements of the GtACH programme (training, falls awareness, the assessment tool, staff roles and acting) are not mutually dependent. A commitment to falls management and fidelity in training might impact positively on falls rate without the GtACH assessment tool being widely completed.

It is also evident that the GtACH programme impacted differently in different settings. This is perhaps most clearly illustrated by the variation in changes to falls rate observed here (see Table 4). In this it is likely that aspects of the GtACH programme sparked different mechanisms in different settings. Training might be *empowering* in one setting, whilst simply being a *refresher* in another. The *GtACH tool* might be viewed with *indifference* by some, or it might be resisted as a *duplication* of local systems by others. In some settings local *champions* encouraged innovation in practice, in others external management inhibited local *ownership* of change.

Comparison with existing literature

Normalisation Process Theory (NPT) (25,26) can help us to make sense of these findings, and help us to understand those factors and mechanisms which enable, or prevent, the active elements of the GtACH programme becoming normal practice. NPT is a mid-range, sociological theory that considers how innovation becomes everyday practice—it views *coherence* (understanding), *cognitive participation* (agreeing), *collective action* (performing) and *monitoring* (assessing) as essential elements of practice becoming normal. The application of mid-range theory is consistent with the realist method.

Understanding the GtACH programme

The importance of communicating the distinctiveness of new provision has been identified in other contexts (5). For

Table 4. Summary

Outcome	Typical contexts	Typical mechanisms
• Falls rate decreased. *[Settings B and E]*	• Limited prior staff training in falls risk management. • Fewer residents living with dementia.	• Awareness of falls risk improved. • Confidence in managing falls improved. • Local champion advocating all staff approach.
• Falls rate stable. *[Settings C & F]*	• Limited prior training in falls risk management. • A high proportion of residents living with dementia. • Existing systems/provision.	• Awareness of falls risk improved. • Staff more engaged with falls management. • Persistence of prior systems. • Acceptance that some falls are inevitable.
• Falls rate increased. *[Setting A and D]*	• Prior training and systems in place. • Not all staff manage falls. • External (chain) management systems. • A high proportion of residents living with dementia.	• Persistence of prior systems. • Limited motivation for change/new systems. • Change process not 'owned' locally. • Acceptance that some falls are inevitable.

GtACH difficulties differentiating it from prior provision challenged its *coherence* and was a barrier to its adoption. Viewed as a duplication of existing systems led to partial adoption—the training well received but the *GtACH tool* not used. Where it was recognised to be different to, or an improvement upon, prior practice GtACH was associated with a reduction in falls (in setting E) or with the maintenance of falls rate amongst a high-risk population (setting C). Reviewing and adapting the GtACH programme for new settings might support a greater sense of its *coherence* by reflecting local contexts and empowering local staff. Both of which have been shown to correlate to more successful intervention (27).

Agreeing with the GtACH programme

The legitimacy of GtACH also rests in staff feeling that it can make a practical difference to residents. In our evaluation, two barriers to such *participation* existed. Firstly, in all settings, some staff viewed paperwork as a distraction from the act of caring for residents and some felt that paperwork was not part of their role. Activities, such as paperwork, which are seen as additional to caring have been identified as a barrier to staff engagement elsewhere (28). Secondly, in settings A, C and D a high proportion of residents living with dementia led staff to question the value of the tool. Improved understanding of dementia might support greater staff *participation* with GtACH in these settings. Elsewhere the importance of alignment with dementia-specialist services has been recognised in care home initiatives (6).

The positive findings of the FinCH trial may enhance the *coherence* of GtACH by removing uncertainty about its effectiveness (3, 4). This, alongside recommendation by regulatory bodies (such as NICE and the CQC in the UK), is likely to increase *participation*.

Performing the GtACH programme

In several settings, the persistence of local, organisational falls management systems inhibited the *collective action* required for full integration of GtACH—staff often facing the unenviable dilemma of duplicating their efforts or ignoring one system or the other. High workloads, and the potential duplication of activity, may impede the implementation of new interventions (28,29). Research activities (such as GtACH) may be deprioritised as was often the case here (29).

Whilst the GtACH *tool* was not widely used, other elements of the GtACH programme were evident in the work done in the care homes. The training was well received and in settings B and C local champions encouraged broader staff engagement in falls management. The role of the Falls Champion, and other informal advocates of GtACH, should be stressed in future implementation; these individuals have a critical role translating the GtACH approach into the *collective action* required for workable local practice (5,28,29).

Assessing the GtACH programme

NPT recognises that *monitoring* outcomes is an important part of establishing new systems. Here, changes to local management and the persistence of external (corporate) management metrics affect the normalisation of the GtACH programme. In settings A, B and F, new managers were more concerned with management transition than monitoring the implementation and impact of GtACH. In all bar setting E external, organisational systems, targets and incentives shaped the policing of GtACH delivery and fidelity. Without locally observed evidence of GtACH making a positive contribution to residents' well-being, it is difficult for it to become established—elsewhere the importance of appropriate targets, sanctions and incentives has been recognised in supporting the delivery of healthcare in long-term care facilities (5).

Strengths and limitations

In line with recent recommendations (24), a theorised approach to evaluation is taken here and the study productively demonstrates the different stages of a realist evaluation—programme theories, iterative theoretical sampling,

C-M-O configuration development and mid-range theory to interpret demi-regularities. In this, it successfully develops a detailed and situated appreciation of those aspects that affect the delivery of the GtACH programme in care homes.

A multidisciplinary team delivered the evaluation and multiple researchers visited each care home on multiple occasions. At least two members of the team reviewed any data and independent public research partners contributed to interim analyses that shaped the interpretation of data and subsequent research sampling decisions.

We have considered the challenges of delivering research in care homes elsewhere (30–32), and here we should acknowledge some of the practical challenges and limitations associated with this evaluation. Few settings had private space where interviews or focus groups could take place. In some settings, management governed which staff participated in the evaluation and some staff could only participate when on their break or off-shift. On several occasions, staffing shortages or local events (such as illness) led to research activities being cancelled or curtailed, and throughout we prioritised the normal functioning of the care home above the delivery of the research.

Conclusions and recommendations

This realist evaluation has shown how local contextual factors might impact on the implementation of a complex intervention in care homes. It has also demonstrated the potentially ambiguous effects which might result—here it was possible for GtACH to increase staff knowledge, awareness and confidence whilst not translating into use of the *GtACH tool*. This works shows that features such as prior practice, staff training, organisational structure, the number of residents living with dementia and changes to care home management are all likely to mediate the introduction of any new way of working.

For GtACH, the limited use of the *GtACH tool* in the short term may not be significant. Although in the longer term it may be that routinely completing the assessment checklist cements the knowledge gained and reduces the risk of benefits diminishing over time. Addressing barriers to use of the checklist (paperwork overload for some, not a responsibility for others) may offer more certain longer-term benefits. Top-up training and closer local monitoring of the completion of the *GtACH tool* might encourage implementation and maintenance in the longer term. Local mentors, and champions for GtACH, might support staff in this.

Ensuring that the GtACH programme is aligned with the priorities and targets of care homes and their parent organisations will support its adoption. Regulatory bodies may have a role to play in this, and their instruction might lead to more consistent monitoring of checklist use. Regulatory recommendation would also generate greater clarity in falls management, and consequently greater commitment to GtACH from care setting managers.

Future research might consider ways in which the *GtACH tool* might be more readily cemented into local practice. This could include a simplified assessment checklist or could include different formats for checklist delivery such as tablet or smartphone platforms, local context and preference may be important in selecting such adaptations.

Supplementary Data: Supplementary data mentioned in the text are available to subscribers in *Age and Ageing* online.

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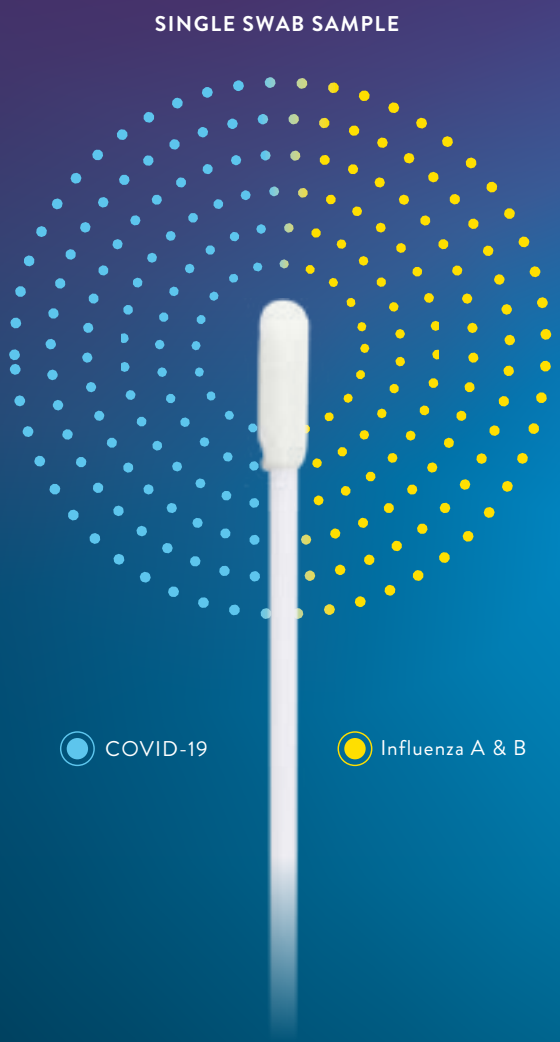

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