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Evaluating a complex palliative integrated care pathway using realist evaluation

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Aims:

- To describe what is complex
- To outline the ICP
- To show how realist evaluation evaluates complex interventions

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What is complexity?

- Simple – recipe like
- Complicated – rocket science
- Complex – bringing up a child

Alex Clark, University of Alberta

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- In 2008 a new Integrated Care Pathway (ICP) was implemented for those with palliative care needs in a locality in the of North East of England
- The aim was to identify patients early, plan their care and prepare for a good death
- The ICP was implemented in 15 GP practices (population of the GP practices was around 78,000 patients)

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Interventions involved in the ICP:

- Palliative care registration
- Out of Hours (OOH) notifications
- Preference discussions
- Advance Care Planning (ACP)
- Anticipatory medication
- The traffic light system
- The surprise question
- The Liverpool Care Pathway (LCP)
- Multidisciplinary team meetings
- Palliative Care Quality Visits (CQI)

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DH Department of Health Social Care

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Hospice at Home

The Palliative Care Partnership

A Primary Care Alliance

NHS North of Tyne

Audit and Research Group

Palliative care expert

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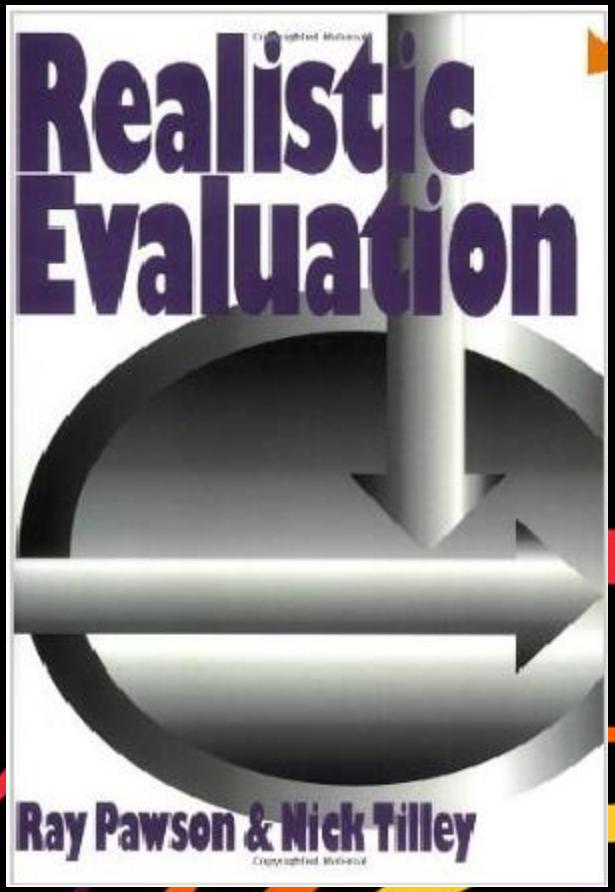
Methodology: Realist Evaluation (Pawson & Tilley, 1997):

- ✓ Appropriate for use with complex interventions
- ✓ Provides more information – not only if the ICP works but how and why
- ✓ Focuses on the generation of 'Programme Theories' which are refined through data collection.



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Initial programme theory:

The initial programme theory stated that the number of people who die in their chosen location (outcome, O), will depend on the GP practice (context, C) they are registered with and how embedded the ICP is (mechanism, M) within that practice, as indicated by the number of interventions used per patient.

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t-tests were used to see if the ICP interventions were increasing in use in all 14 GP practices since ICP implementation, using GP practice data.

There was a significant effect of time on:
- Palliative care registrations
- Preference discussions
- LCP use

There was not a significant effect of time on:
- Anticipatory medication used (increasing but not significant)
- Locality advance care plan

Example

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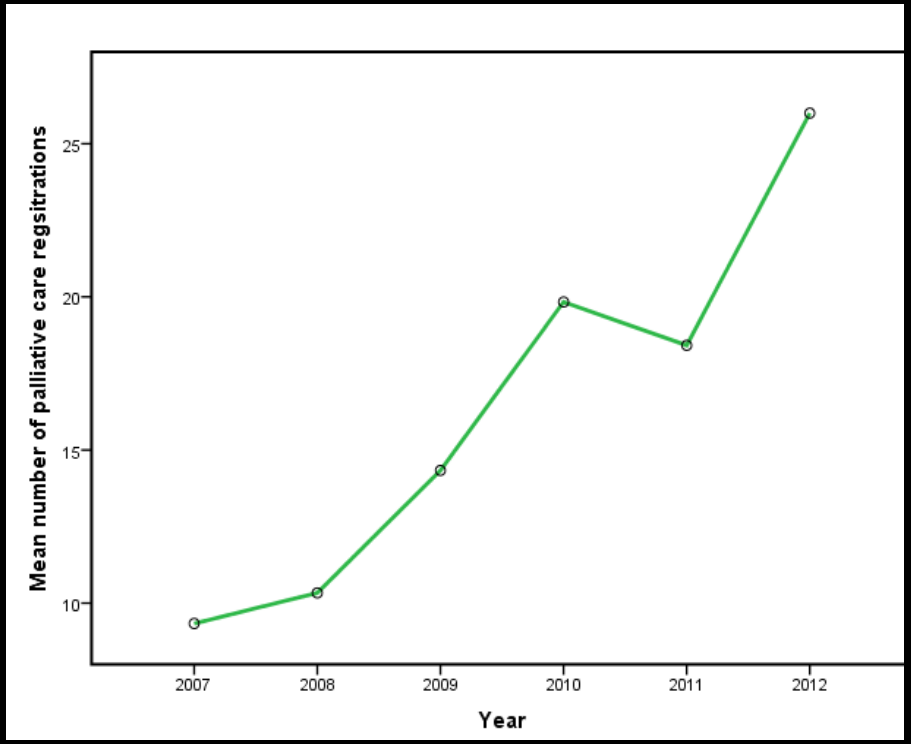
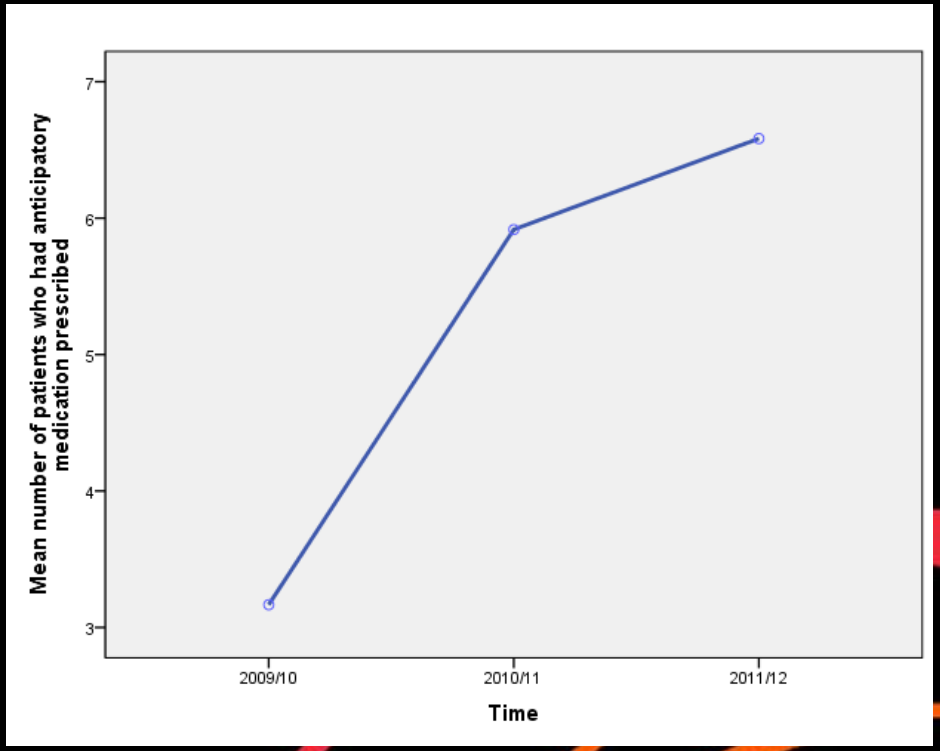


Palliative care registrations from 2009/10 to 2011/12.



Anticipatory medication prescriptions from 2009/10 to 2011/12.

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Whilst trying to understand the statistical results in focus groups, the importance of continuous quality improvement sessions in the form of Palliative Care Quality Visits (PCQV) was established:

GP2 (FG2): … *I know that a lot of the practices, you know,* ***have engaged a lot more, further, after one of (founder's) visits*** *because of the information that was fed back to them."*

Community Matron 2 (FG1): "There's something about, which I've thought about since the beginning of this meeting, is that ***there's been a great leadership with this,*** *these visits… before we've got to get it ready, we've got to get it right and then you do sort of pick up on the points and then it's just human nature everything drops off again and I think if the leadership doesn't keep going it's sort of keeping that, gotta keep it going…"*

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GP2 (FG2): "Yes I think there's, there's, before you're about to have it there's a stimulus, after you've had it ***because of the feedback there's a stimulus and I know I've, in the past our statistics improved*** *because it stimulated us*

Community Matron 2 (FG1): *"(I've) been involved with two because we cover two practices, and they've both been very different* ***and they've been constructive, very honest, but constructive and actions have happened as a consequence.***"

Example

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What was known so far?

1. That intervention use was increasing for palliative care registrations, preference discussions and the LCP

1. The focus groups identified that CQI in the form of PCQV provided them with motivation, support and leadership in implementing the ICP.

What needed to be known?

1. Have any of the practices embedded the ICP more?
2. If so, how and why?

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Three high performing practices: Cluster analysis

• Cluster analysis can be used to discover structures in data but does not explain why they exist.

• This analysis was used to identify relatively homogeneous groups of GP practices based on selected characteristics (such as ICP interventions or place of death outcomes).

• Two separate cluster analyses were conducted:

1. **one focused on outcomes**

1. **the other focused on a number of intermediate outcomes from ICP interventions**

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Both cluster analyses completed showed **two clusters**

Cluster 1: GP practices A, B, C, F, G, H, J, K, L, M and N.

Cluster 2: GP ractices D, E and I.

Cluster 2 had significantly more patients who died in (1) their own home and (2) the presumed preferred place of death, than cluster 1

Cluster 2 used significantly more palliative care registrations, OOH notifications, DS1500 forms, anticipatory medication, and LCP than Cluster 1

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• **Practice D, E and I all have peer support and leadership** in the form of opinion leads or a champion.

GP4 (FG3): *"I think from my point of view (founder) visits were very supportive and helpful but in addition to that,* ***(expert opinion leader) here (at practice D), he was sort of pushing the (advance) care planning agenda as well and motivated us as a practice as well."***

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Practices D, E and I also saw the relative advantage of the ICP:

Practice D representative: *"The ICP ensures good communication around patient care and thus improves patient care. The palliative care pathway helps us provide high quality palliative care. It ensures all aspects of palliative care are addressed and also communicated to Out of Hours care providers*

Practice E representative: *"It is a good framework for us, based on sound clinical evidence."*

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• Nursing teams are shared between practices in the locality.

• All of the high performing practices share a nursing team with a neighbouring practice.

• However, despite being shared with another practice, **all of the high performing practices have their nursing team on site.**

• **Having the nursing team on site:**
- makes weekly MDT meetings more achievable
- allows for a more cohesive team (more peer support)
- allows practices more contact with their champion or opinion lead, who promote the palliative agenda
- provides opportunity for informal contact 'corridor contacts'

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→ **Focus groups confirmed the importance of the nursing team on site.**

GP4 (FG3): *"And I think also the regular MDT meetings, we talk about our palliative care meetings each week and possibly stuff gets highlighted then that wouldn't necessarily in the course of everyday surgery because it actually is a space to talk about these patients regularly and also* ***I would say that the district nurses are our eyes on the ground really, they see a lot more of the patients on a daily basis than we do as GPs and its good for them to remind us exactly what's going on regularly regarding these patients."***

Social care team lead (FG3): ***"So you're talking about physical face to face, peer support, sharing information and sort of good practice and having a bit of reflection going on and that sort of pushes it forward and keeps up that enthusiasm around it really.*** *You can see good outcomes for people."*

GP3 (FG3): ***"The thing with nurses being on site… (district nurse) was always prodding us (as GPs) to do things."***

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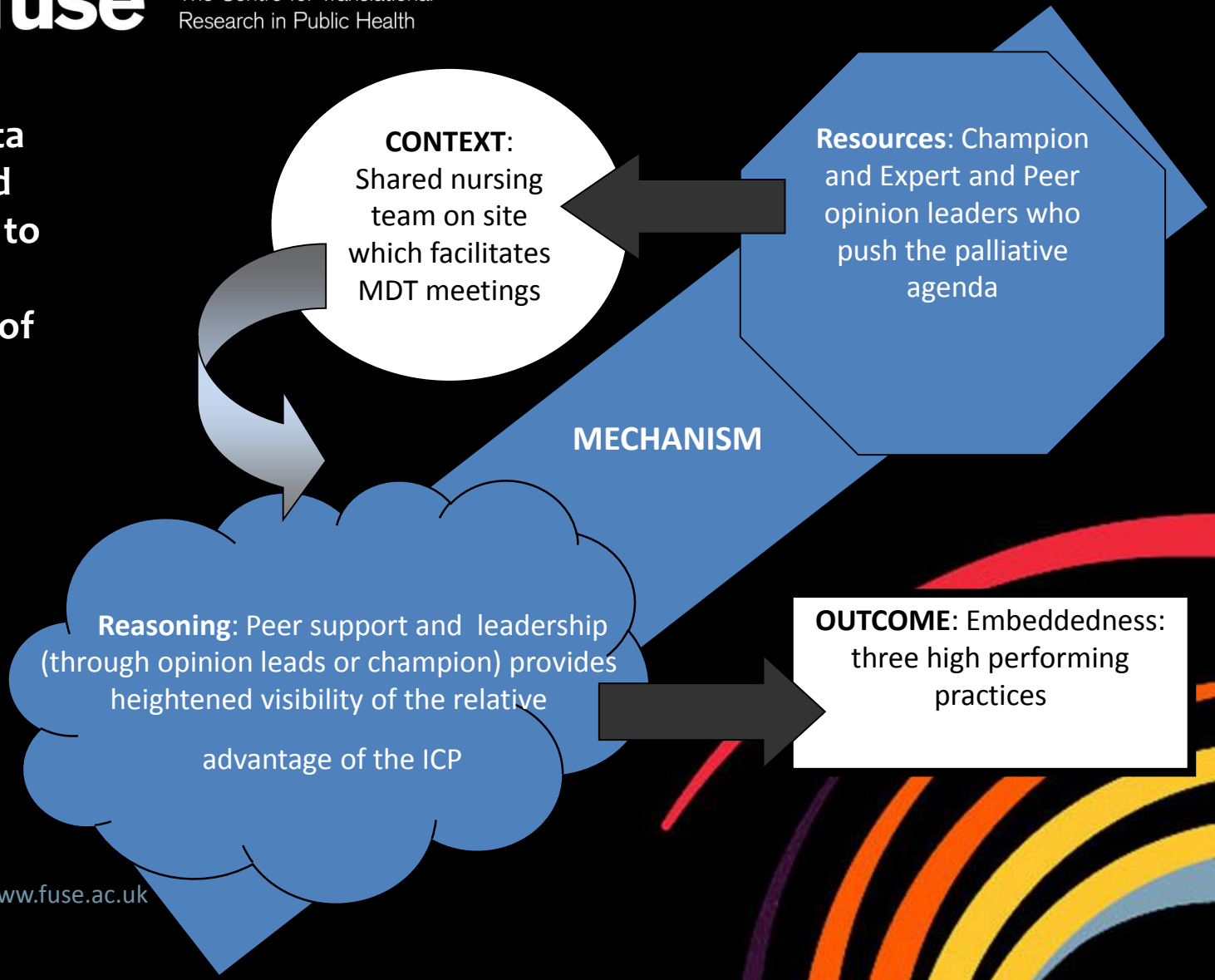
All of the data collected and analysed led to the formulation of a refined programme theory:



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Testing the refined programme theory in a lower performing practice confirmed the programme theory:

Context: The nursing team was not on site. The practice described (in a PCQV) feeling detached from the locality.

Mechanism: They had no peer or expert opinion lead to promote the palliative agenda and only had one PCQV.

Outcome: Less use of the palliative care register and other ICP interventions, ICP is less embedded.

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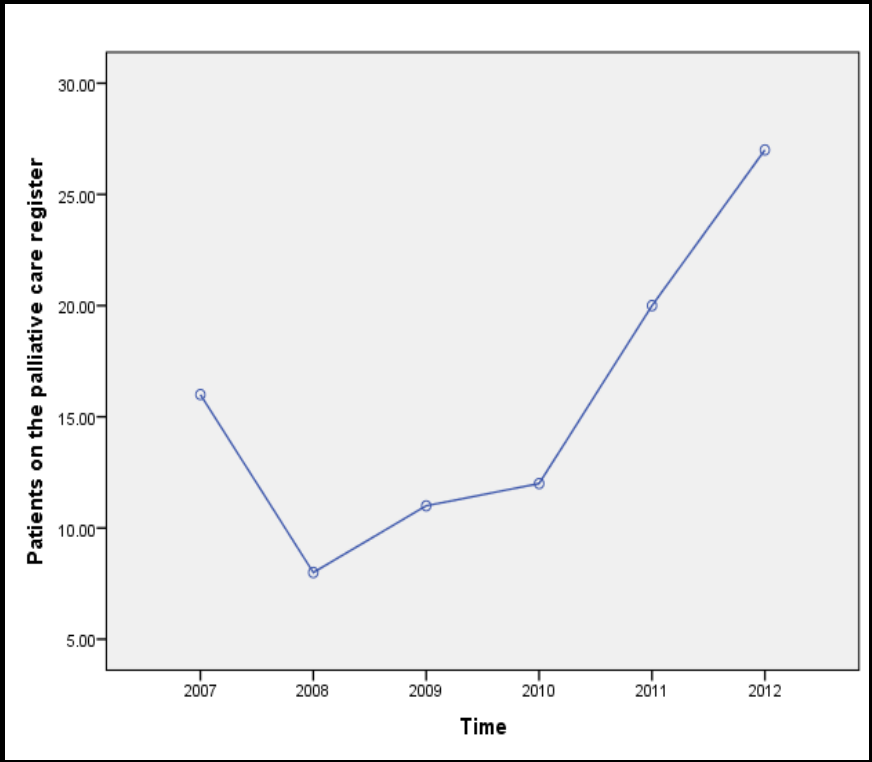

The number of palliative care registrations in Practice C from 2007 to 2012, using Death Audit data. www.fuse.ac.uk

The number of patients who had interventions in Practice C, using MIQUEST data.

	2009/10	2010/11	2011/12
Preference Discussions	3	3	10
ACP	2	2	5
Anticipatory medication	3	3	8
LCP	2	4	8

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Conclusions

- Social science interventions are normally complex
- The ICP was complex
- Realist evaluation provided a way to evaluate the ICP whilst embracing it's complexity

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Thank you

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