A J-curve of interprofessional change: co-locating non-health partners in an oncology unit
--Manuscript Draft--

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Abstract:	Background Internationally, clinicians face increased demand, pressure on resources and unmet patient needs. A community social support service was co-located within cancer clinics in Scotland to help meet some of these needs. Aim Aims were to analyse the impact of the service on clinical staff and to propose an explanatory theory of change. Method Qualitative exploratory design, using thematic analysis of semi-structured interviews with eight nurse specialists and two medical oncologists from lung, breast, head and neck and gastro-intestinal oncology teams in Scotland, UK, in 2018/19. Findings Four themes captured the process: 'The Conversation', 'a better experience', 'freedom to focus' and 'working hand in hand'. Conclusion These four themes together explained the process of effective inter-professional working. This process would have been predicted by the J-Curve literature on diffusion of innovations. Linking J-Curve theory to this successful process provides new understanding that could prove essential for clinical teams who are implementing change within their practice.
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Sophie Gardner
Editor
British Journal of Nursing
Email: BJN Editorial Office em@editorialmanager.com
Dear Sophie

Ref: Ms. No. bjon.2019.0124 A J-curve of interprofessional change: co-locating non-health partners in an oncology unit British Journal of Nursing

Thank you for considering our paper for publication in BJN. We have revised the paper as requested. Specifically, we have addressed all the comments below. We have addressed them on a point by point basis, with action taken described in italics. We hope this helps the reviewers see how we have responded to their comments.

Reviewer #1: Unclear of the date this study took place.
The study took place in late 2018/early 2019. This is in both the abstract and in the methods section of the paper.

The aim in the abstract is not the same as the aim in the paper. Why is the intro on the benefits of co-location if this is not the aim - abstract aims to look at benefit of the new link worker service. I am confused as to whether to aim is to evaluate a new service (with non health cancer specialists) or to look at co-location. The paper seems to address co-location as a preferred way of effective working and also introduces the work with link officers. The authors do not differentiate between the 2 new methods of working. I have re read this a few times and it is becoming clearer that in 2016 both co-location and the link officers were part of an initiative by health and local authority partnerships in Scotland - but was this is all LAs or just Glasgow? The background needs to be clearer and the aims of the abstract and paper have to match.

We agree and have rewritten both abstract and background to synchronise better with each other. The aim of the paper is to evaluate the service. The issue of colocation is relevant in that the evidence suggests colocation would make it more likely that the project would succeed. However, the aim is to evaluate the service, so this is now hopefully clear.

I see later (page 3) 2014 ICJ launched - where does this fit with what happened in 2016. The paper needs to have a flow to it.
Agree. Hopefully this is now there.

Page 4 explains who the link workers are and this would ideally come earlier or at least in the early mention have a 'described later' signpost.

Hopefully the rewritten background puts all in order

Page 4 - Do people apply to become link workers and pay for their own 3 month training? A reference to who does the training would be useful as it is difficult to see how other areas nationally and globally could copy this method.

We have referenced the original, publicly available report here.and added Please see Snowden & Young, (2016) for more information.

Page 4 'ICJ assess' this is incorrect. A journey cannot assess. Who does the assessment?
Have added 'link worker'

Page 4 number of respondents who took part is a result
It is. Moved to relevant section.

Page 5 the method suggests the evaluation was of the ICJ. Why did link workers not get interviewed?
This study was about the clinicians. Other studies focus on the thoughts of the link workers. This is made clear in the text now.

Page 6 use sentence case for all themes identified.
OK

Did the staff receive no help implementing the new ICJ? Trying to 'get it right' would suggest they were unprepared - we need to know what preparation was given to staff before implementation - surely this should be the background in order to inform the reader of the circumstances practitioners were in.
The staff were all aware of ICJ, and many had referred into the service prior to its colocation. This has been added to the introduction/background.

The discussion describes yet another slightly different aim. The specialists are asked about the service in the data collection.
It is about the service. Hopefuly this is all clear now

The discussion on the J curve and conclusion are excellent - I would just add that staff preparation and a good underpinning support for a new service is absolutely essential. It is clear Glasgow had implemented the new service with a supportive infrastructure. Too often new initiatives are made with no support and one can see why professionals lack confidence
Thank you! And Yes, absolutely

Figure one - Does this read that performance was better before 'The conversation'? Reading further I see this is the case and why - the J curve!
Yes!

Why not start out with the J curve? All new initiatives have to have a good infrastructure and a committed team - we need to know about this.
It would give the game away, and show our hand before reaching the conclusion iteratively

I loved the discussion on the J curve but I think you should state that staff preparation and a good infrastructure are necessary for all new services.
We agree. This has been added to the limitations:

Finally, one of the main reasons the venture was successful could have been the level of knowledge already held by clinicians when ICJ was co-located. Most of them already knew of, and referred into the service, so had already been convinced of its worth. They didn't need any extra training. The dip in the J Curve may be much longer where a longer period of time is needed to convince others of the worth of the particular venture.

Reviewer #2: This is a useful piece of primary research and written well. Good use of headings to guide the reader.
Thank you

Overall the discussion is good and is backed with useful literature however the WHO 1997 is used as the most recent statistics- are there more up to date statistics given this was 22 years ago?
Yes, apologies.

Graphics used are appropriate and useful. Box 1 could do with additional graphics- maybe statics as graphics and bullet points to reduce the text dense. The summary of box 1 in your main text is arguably not needed and is repetitive.
We have removed the summary from the text and focused the text in box 1 as you suggest, reducing it down to bullet points.

Research validity is good- this would be improved by using more studies to compare and contrast results with in the discussion section.
We have added more recent references throughout.

	In addition, please consider the transferability of your research findings to other similar teams.
	Thanks. We have specified the issue of transferability in the intro, and revisited it in conclusion now.
	We think the paper has been improved as a function of the review and hopefully you will agree. As a team we would like to thank you and the reviewers, and if you need any further changes please let us know.
	Yours sincerely Austyn Snowden

Additional Information:

Question	Response
Please enter the word count of your manuscript **excluding references and tables**	3800

A J-curve of interprofessional change: co-locating non-health partners in an oncology unit

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No conflict of interest

Abstract

Background

Internationally, clinicians face increased demand, pressure on resources and unmet patient needs. A community social support service was co-located within cancer clinics in Scotland to help meet some of these needs.

Aim

Aims were to analyse the impact of the service on clinical staff and to propose an explanatory theory of change.

Method

Qualitative exploratory design, using thematic analysis of semi-structured interviews with eight nurse specialists and two medical oncologists from lung, breast, head and neck and gastro-intestinal oncology teams in Scotland, UK, in 2018/19.

Findings

Four themes captured the process: 'The Conversation', 'a better experience', 'freedom to focus' and 'working hand in hand'.

Conclusion

These four themes together explained the process of effective inter-professional working. This process would have been predicted by the J-Curve literature on diffusion of innovations. Linking J-Curve theory to this successful process provides new understanding that could prove essential for clinical teams who are implementing change within their practice.

Key words: inter-professional, cancer, nurse specialist, qualitative, collaboration, implementation, holistic needs assessment, supportive care

Introduction

This paper examines how clinicians working in outpatient cancer care adapted to the co-location of 'Improving the Cancer Journey' (ICJ), a novel community support service designed to meet the holistic concerns of every cancer patient in Glasgow, Scotland (Box 1). Since inception in 2014, ICJ has helped to address the holistic needs of over 4000 people; especially helping those most in need due to social deprivation Snowden, Young, & Savinc, 2018). ICJ is offered to all people newly diagnosed with cancer via letter, but is also available to people with existing cancers too, at any stage of their illness or recovery. To widen access for all people living with cancer, in 2016 ICJ was situated within outpatient services in local hospitals in Glasgow. The positive impact ICJ has had on patients is documented (Young & Snowden, 2019) This paper focuses on understanding how being newly co-located with ICJ affected the way *clinicians* worked. This is important to understand because it is a working example of integrating health and social care, a long-standing aim that has proved historically difficult (Heenan & Birrell,2006)

Integrating health and social care is the best way to deliver safe, effective, person centred cancer care (Nancarrow et al., 2013; The Scottish Government, 2016),.Indeed, interprofessional working across professions and sectors is a goal of international health policy.. However, creating and sustaining a joined-up, functioning inter-professional team is difficult (Øvretveit, 2015). Common impediments include poor communication and threats to professional identity (Stull & Blue, 2016). When multidisciplinary team members do not understand or value each other's roles and responsibilities, constructive working relationships deteriorate. On the positive side, a better understanding of other team members' roles leads to better working relationships, lower risk of burnout and better organisation of care (Birkeland, Tuntland, Førland, Jakobsen, & Langeland, 2017). It is unsurprising therefore that Xyrichis & Lowton (2008) found that geographical proximity of team members and smaller team size were more likely to lead to successful inter-professional working. Conversely, geographical separation of disciplines sustains professional boundaries (King et al., 2012), so a key factor supporting the likely success of interdisciplinary teams is co-location (Wener & Woodgate, 2016).

As a result, when health and local authority care partners in Scotland wanted to improve access to ICJ they took the service into outpatient clinics in Glasgow. In practical terms this

meant that cancer specialist nurses and doctors worked alongside 'link officers', non-health cancer specialists from the local authority (box 1), for the first time. The unknown was how this move would change clinicians' working practices. A common challenge for health practitioners is that, despite having the will, they do not have the time or skills to support patients with complex social and practical needs, such as helping them navigate the financial options available to them (West, Barron, & Reeves, 2005). If a non-clinical expert can support patients with their social and practical concerns instead, this should improve the system by allowing clinicians to be able to focus on their own specialities, with positive implications for both time and resources (Trevatt & Leary, 2013).

Witnessing this should have a positive impact on the way clinicians engage with both ICJ workers and patients; but this was not known before the study. It depends on outcomes being visibly positive to all. Also, although it is intuitive to imagine that a helpful service would be well received, busy clinicians may instead perceive the project as unwanted extra work. Any change, no matter how well intentioned is known to create discomfort and potential disengagement (Snowden & Young, 2017).,Therefore, the way these clinicians engaged with the service could be important transferable knowledge for those attempting to understand and apply similar ventures in future.

Aims

1. to analyse the impact of theICJ service on clinical staff, and
2. to propose an explanatory theory of change

Box 1.

The intervention - Improving the Cancer Journey

The service 'Improving the Cancer Journey' (ICJ) was launched in 2014 in Glasgow, Scotland. ICJ is managed by the city council (the administrative body that governs the city) and the local National Health Service board is a key partner alongside a major UK cancer charity. Social Work Services and various services and non-governmental organisations located across health, social care and the third sector are also partners. CJ supports people with a range of cancer types but the most (25%) common diagnosis is lung cancer. Most

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(30%) individuals at the time of their interaction with ICJ are receiving treatmentThere is an almost even split of men and women who use the service and the majority of people who use the service are aged between 55-65 years old.

Service delivery

- Every person in the Glasgow City Council area with a new diagnosis of cancer is sent a letter from ICJ offering their assistance in the form of a holistic needs assessment (HNA).
- Clinicians also refer their patients into ICJ or people can self-refer.
- HNA is a process for identifying concerns (grouped into physical, practical, emotional, spiritual and informational domains) and then signposting or referring for information and/or support.
- The HNA is facilitated by a 'link officer' Link officers have professional backgrounds in housing, financial inclusion, home care and social care. In addition, they have, or are working towards being accredited with a level 3 Scottish Vocational Qualification (SVQ) in healthcare support to reflect their competencies in this area. This qualification is paid for by the council and is academically equivalent to graduate diploma level, or second year of baccalaureate degree. This is supplemented with a 3-month induction period, training and development by ICJ partners.

Widening access

ICJ link workers assesses the person at a place of their choice which may include that person's home. However, since 2016 link offers were situated in outpatient clinics and in designated areas within local hospitals and hospices. In particular, as ICJ supports a high number of individuals with lung cancer two outpatient lung clinics within the Glasgow city area adopted an 'opt in' approach and all patients unless they opted out were automatically referred into ICJ following their appointment with a clinician. The link officer is physically co-located at each lung clinic one day per week. Typically, in the initial appointment with ICJ patient, needs are identified and a care plan is co-constructed between the patient and link officer. For those seen in the lung clinic the care plan is then uploaded onto an electronic clinical portal to enable consistency in care across the clinical

teams. Patients are then reviewed by ICJ, between two weeks to five months later depending on severity of concerns raised and/or poor prognosis.

Method

Design

This study adopted a qualitative exploratory approach using convenience sampling. Thematic analysis following Braun & Clarke's, (2006) guidelines were used to analyse the data. The Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines were used to report findings (Tong, Sainsbury, & Craig, 2007).

Participants and setting

Twelve clinicians were approached by email. These particular clinicians were approached as they have an established association with ICJ. That is, they either work alongside the link officer, as in the lung team, or they make referrals into ICJ. All participants work for an NHS hospital within the Greater Glasgow & Clyde health board in Scotland, UK.

Interviews were conducted by one researcher (JY) between September 2018-January 2019 in a private room in the participant's workplace. A semi-structured interview schedule was used to explore the participant's perceptions of ICJ. That included; motivations for collaborating with the service, what difference it has made to their practice and what benefits this collaboration may have for their patients. However, the schedule was used flexibly to allow the participants to describe their experiences of engaging with the service in their own words. After completing the tenth interview data saturation was reached (Mills, Francis, & Bonner, 2008). This was deemed to have occurred as no new themes were identified from the data. Interviews lasted between 35 minutes to 50 minutes, were audio recorded and then transcribed verbatim. Finally, once the data had been analysed, in June 2019 the results were discussed with the participants to find out if they resonated with their experience. All participants felt that that their perceptions and experiences had been captured meaningfully within our interpretation.

Ethical approval

Ethical approval was obtained from the West of Scotland Research Ethics Committee and (university) ethics committee.

Analysis

The data were analyzed following Braun & Clarke's thematic analysis (Braun & Clarke, 2006). This involves identifying, analyzing and reporting patterns or themes across the dataset. Both authors (JY and AS) read the transcripts and independently generated line by line codes. They then met to discuss early interpretations and reconcile any differences. The researchers then constructed themes from the codes to create an accurate representation of the whole.

Results

Ten clinicians agreed to be interviewed on their perceptions of an integrated ICJ service. The two who did not take part did not reply to the email request for participation. The majority (n=6) of the clinicians were from lung cancer teams and the remaining were from breast, gastro-intestinal and head and neck specialisms located in clinics in district general hospitals within Glasgow. The majority, (n=8) were Cancer Nurse Specialists and the remaining were Medical Oncologists (n=2). Nine were female and one was male. Clinical experience ranged from 1 to 15 years. The more experienced professionals contrasted their working practices before and after their collaboration with ICJ (n=8). Those who were newer in post reflected on their current practice (n=2).

Four themes were identified from the data, each representing a different phase of integration (figure 1). They were: 'The Conversation', 'a better experience', 'Freedom to focus'; and 'Working hand in hand'.
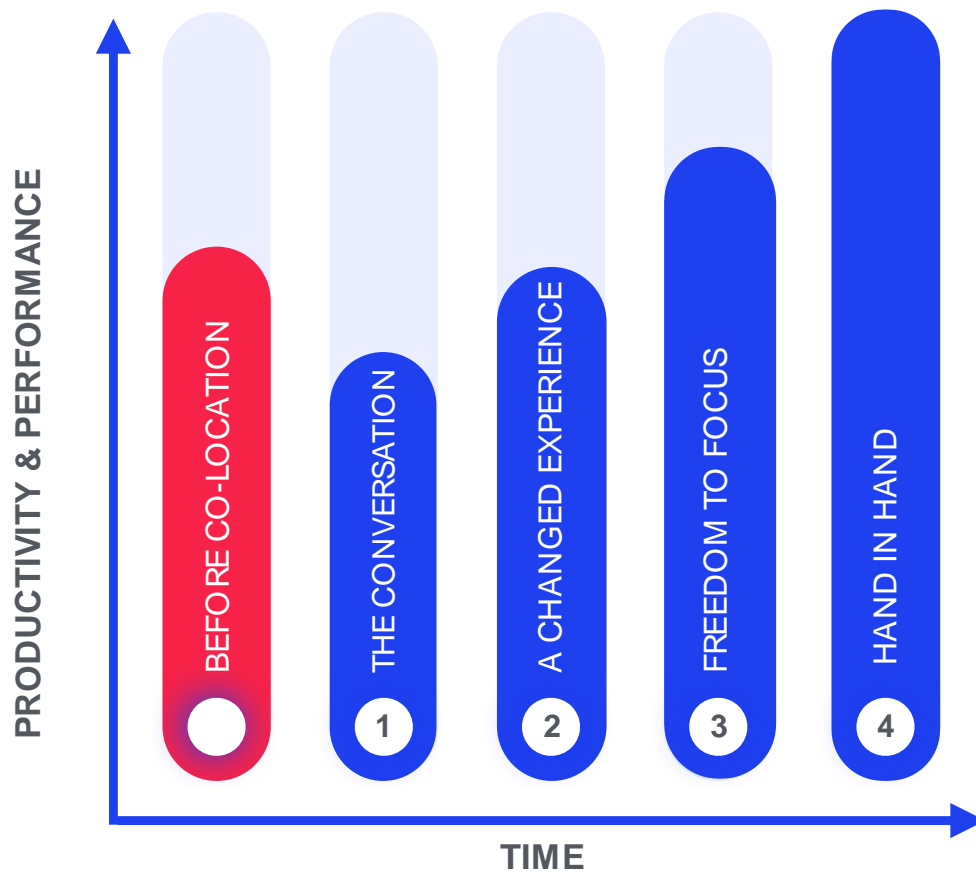
Figure 1: the four themes

The first theme, 'The Conversation' shows how a new way of working needs to be managed sensitively for it to be effective.

Theme 1- The Conversation

The point at which ICJ is introduced to the patient was emphasised as being a significant moment. Participants referred to it as 'The Conversation', with some expressing hesitation about getting it right:

> *"I think something we can work harder on and I think it's just difficult sometimes trying to work out having the conversation at the right time and catching the patient at the right time* (Participant 2)

Emphasising that it has to be done 'at the right time' suggests it was initially perceived as a sensitive, or difficult topic. Due to that there was some reluctance to engage, as some participants viewed ICJ as an additional layer of complexity, a burden to those with already challenging lives and needs:

"When it first started I had a little trouble thinking: 'how do I put this to people who've got enough to cope with?' …" (Participant 6)

However, once it became evident that ICJ could provide relevant support for their patients, confidence and trust developed and 'The Conversation' became easier. For participant 4 the benefit had to be personally experienced:

"It was just a confidence thing I didn't want to promise something I hadn't experienced but then patients are coming back and saying 'can I get it for my friend?' and then you're seeing it, it gives you much more confidence to say 'I can sell this service'."
(Participant 4)

The next theme shows that as participants began to report appreciation of the new service, they were more comfortable expressing that to their patients.

Theme 2: Changing the experience

The interviewees stated that by supporting non-clinical concerns the link officers were improving the patient experience:

"They sort out all the things that can make for a stressful life. I often say in my job you can't change the outcome but you can change the experience. And I think that is how their job is too" (Participant 6)

This is a significant quote as it demonstrates that this collaboration is providing the mechanisms to provide a more holistic experience for this patient. Observing the positive impact that this additional support had on their patient's quality of life reinforced views on the value of this inter-professional collaboration. What is more, it was recognised that by taking collective responsibility for their patients' holistic needs it would help to connect the professionals together, develop trust and respect for each other and positively shape patient perceptions:

"We made the decision to very much include ICJ as part of the team so it felt to be a routine package of care that we offer everyone. It was very much, we were very determined that it was seen as a coordinated, synchronised package" (Participant 8)

Integrating knowledge and skills across the professions is essential for improved patient outcomes. For example, the clinicians reflected on how their patient's physical, psychological and practical needs are commonly intertwined:

> "If someone isn't supported practically it has a psychological impact on them. And then it manifests itself physically and then you're dealing with someone who's really not in a good place and going downhill pretty fast. Whereas if they are supported in the community they're a lot happier, they feel supported" (Participant 7)

Theme 3: Freedom to focus

This theme captures participant views on how directing their patients to ICJ for a range of non-clinical support has allowed them to regain a clinical focus within their consultations:

> "My clinical role is changing quite a lot. With new and developing treatments we're becoming quite involved in this part of things. So, I think our role as a whole has changed and linking with ICJ has given us the space to let this happen" (Participant 1)

> "I'm now able to concentrate on my part of the job. I can concentrate on the part that is mine building from what the medics have said knowing that the other part is going to be taken care of and to a much better higher standard" (Participant 3)

There is recognition of the need to support patients with all of their concerns combined with the acknowledgement that they may not have the expertise and time to adequately deal with these non-clinical issues. Previous attempts to do so had stretched their workload to the limit, and while they were providing some level of service it was recognised that it was not always optimal:

> "When we did have to deal with the social issues it was very time consuming and took us away from the clinical work. We didn't have the knowledge so patients were getting a really raw, a really bad deal" (Participant 4)

As a result of this collaboration with ICJ, a number of the clinicians described a considerable contrast between their old and this current way of working.

> "I think for us it enhances our job satisfaction because before we were working we were aware that there were bits we weren't dealing with but we knew we had only so

many balls that we can juggle. But now I don't think we feel there is anything left unturned" (Participant 5)

Consequently, realising that they can now refocus on their clinical role was seen to have a positive impact on staff morale and well-being. Most participants reported feeling less worried, less pressured and less guilty knowing they can now easily refer their patients for further support.

" I think because you feel that burden is taken off you and someone has taken it, you do feel overall we're doing a better job and we are better addressing the needs of the patient" (Participant 2)

Theme 4: Working hand in hand

"If we can improve the patient's quality of life and we can do it with the least amount of inconvenience for them then that is success... and that pretty much has been the CNS with ICJ sort of holding hands, is how I view it" (Participant 2)

The final theme encapsulates comments pertaining to the close working relationship that has emerged, both geographically and clinically. As in the literature, geographical proximity was singled out as an important element in the development of this partnership as it reinforced the idea of professionals physically working together. When the link officer was co-located within the clinic patients could seamlessly move through appointments. Being situated together also impacted positively on communication. In particular, the ability to have face-to face interactions ensured that queries could be dealt with quickly:

"I think the fact that they're here so if there's any issues we can just run down and speak to them. And if we have someone who needs to see them we can just get them booked in straight away" (Participant 1)

"It's one service, a health and social care service. One stop. That's how I have it in my head, its teamwork and plus it's not an extra visit because they are here anyway" (Participant 4)

This theme also captures how mutually reliant the two services had become; viewing their roles as co-dependent and working to one purpose:

"In terms of their expert knowledge I'm learning from that. I'm learning about things in the community that we can refer patients to that I didn't know existed. So it's a learning curve for us all. And just to know the patients are having a more improved service from anything I could have offered is fantastic" (Participant 6)

Discussion

The aim of this study was to explore the impact of co-locating a non-health professional into clinical practice. The findings largely aligned with the literature of interdisciplinary working discussed at the start of this paper. First came the difficulties of adapting to new ways of working, at which point the service appeared more complex than it had done before the initiative. This was followed by clinicians witnessing the benefit of having the service co-located, quite quickly followed by clinicians identifying positive changes in their own practice as the service unburdened them of tasks they would have previously attempted, but were not appropriately skilled to manage. This in turn led to a much better division of labour, as each professional came to better understand the role and function of the other; at which point the two services became one. This discussion now examines this process to see if there is any transferable knowledge.

In the first phase, clinicians explained why they did not want to engage. They saw the new service as extra work, and a burden to both themselves, but particularly the patients. They saw their role as protecting patients from having to deal with something else when they were particularly vulnerable. Also, because some lacked confidence in explaining what the service entailed (The Conversation), they struggled to discuss it at all. This chimes with a recent study where similar language was used by nurses explaining why they struggled to engage with research in a hospice environment (Snowden & Young, 2017). They lacked confidence in explaining the study protocol and feared burdening their patients.

These perspectives changed when it became clear that the service often improved the patient experience and simultaneously allowed clinicians to focus more on their own specialities. This perspective was unanimous, leading on to the view that care would be considered worse if the service was taken away.

There are many ways of conceptualising this process. Rogers' (2003) classic 'theory of diffusion' for example describes the process through which an innovation spreads over time among the members of a social system. Based on the normal distribution, it is essentially a description of a passive process whereby people of different natures (early adopters, laggards and so on) are seen as likely to adopt the new idea based on their propensity for change. However, whilst a useful illustration of diffusion under normal conditions, we argue that a better theoretical fit in this case is the J curve (figure 2).
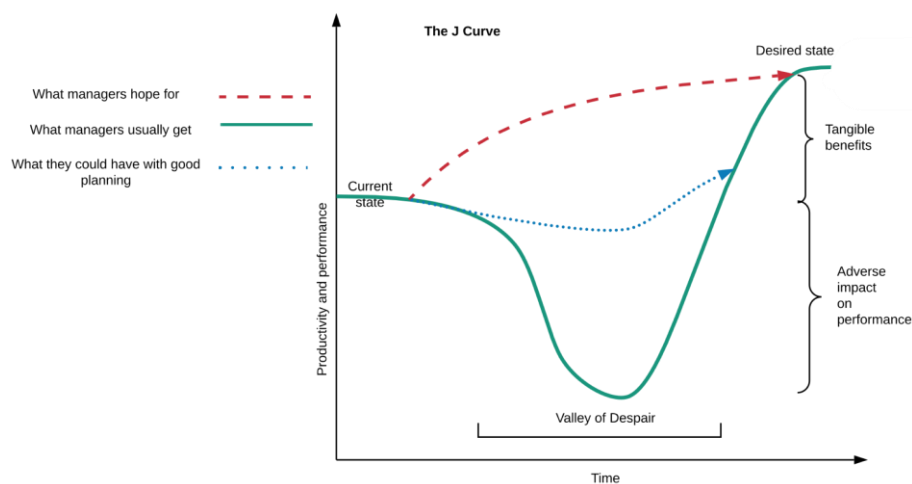

Figure 2. The J-curve as envisaged by Viney (drawn by Snowden, so no copyright issues)

Originally used to explain patterns of conforming behaviour such as punctuality (Allport, 1934; Dudycha, 1937), the J curve has subsequently been adopted by economists and business analysts to explain diffusion of ideas where initial resistance to change is apparent (Mehdi Jelassi, Trabelsi, & Turki, 2017). The theory is that change is a function of motivation and time (Keefe, 2008). A period of disruption should be classed as normal behaviour because any innovation disrupts the usual routine (Kawulich, 2015; Viney, 2005). The J curve is therefore a useful starting point for any innovation as it builds in an expectation of an element of resistance.

Further, it is useful because much of the literature on leadership and the J curve focuses on navigating this 'valley of despair'(VoD) (Chase & Dickson, 2017), alternatively referred to as the 'valley of death' (VoD) by Markham, Ward, Aiman-Smith, & Kingon, (2010).The VoD is therefore a useful way of understanding why a critical area of development has not happened (Markham et al., 2010). This literature could therefore be very helpful for those

interested in the transferability of the findings presented here. Innovations with a clear unambiguous advantage over an old way of working are more easily adopted of course (Greenhalgh & Kyriakidou, 2004), and that is what happened here, yet even in these circumstances there was still an element of resistance in places.

Limitations

Most of the interviewees came from a single area. The ICJ link officer is physically located within the lung teams therefore we prioritised recruiting a larger number of lung specialists in order to capture their perceptions of this unique collaboration. However, as the service develops and expands link officers will be situated in additional oncology teams representing different cancer types. Future research will seek the views of these clinicians.

A further limitation of this study is its relevance to other geographical settings and health care systems. For example, the west of Scotland has among the highest lung cancer incidence rates in the world (ISD Scotland, 2019). There are also considerable areas of deprivation within Glasgow (Maantay, 2017). One of the main advantages of collaborating with ICJ is their ability to support their patients' practical and financial concerns. However, the need for such a service may not be the same in other areas.

Finally, one of the main reasons the venture was successful may have been the level of knowledge already held by clinicians when ICJ was co-located. Most of them already knew of, and referred into the service, so may have already been convinced of its worth. They did not need any extra training that may be necessary in other projects. In other words, the dip in the J Curve may be much longer where an extended period of time is needed to convince others of the worth of the particular venture.

Conclusion

It is important to understand how new inter-professional ventures succeed or fail in response to the global need to make healthcare more holistic. Integrating any new service into an existing way of working can take time and sensitivity, so qualitative studies such as this are valuable as they provide a more detailed understanding of the range of factors that may help or hinder collaborative working. Despite some participants being aware of the positive impact ICJ had on some patients, this had happened at a distance and so most required tangible

evidence that any change to their existing practice was going to be of some benefit to patients. This evidence appeared first as hearsay from one or two local anecdotal reports, before colleagues witnessed the benefits to patients first hand. At this point the benefit was accepted by the wider team who subsequently described their new colleagues as invaluable and irreplaceable.

Whilst explicable as a working example of the J-curve theory of innovation, it is important not to generalise too far from a single example. This venture succeeded mainly because it helped patients. It may seem like a very obvious point, but many excellent ideas fail in the 'valley of despair', and even though this particular venture came with a realistic degree of optimism it still had to overcome antipathy to start with. Therefore, the first and most important recommendation is that planners should ensure that all parties are aware of any and all positive impacts on patients as comprehensively as possible. Secondly, even if they succeed in doing this they should still *expect things to get worse* before they get better. Be prepared for the valley of despair. However, preparation will improve the chances of developing successful interprofessional care.

References

Amir, Z., Scully, J., & Borrill, C. (2004). The professional role of breast cancer nurses in multi-disciplinary breast cancer care teams. *European Journal of Oncology Nursing*, *8*(4), 306-314.

Allport, F., H. (1934). The J-Curve Hypothesis of Conforming Behavior. *Journal of Social Psychology.*, *5*, 141-183.

Birkeland, A., Tuntland, H., Førland, O., Jakobsen, F. F., & Langeland, E. (2017). Interdisciplinary collaboration in reablement: a qualitative study. *Journal of Multidisciplinary Healthcare*. https://doi.org/10.2147/JMDH.S133417

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology, (March 2015), 37–41. https://doi.org/10.1191/1478088706qp063oa

Chase, J. G., & Dickson, J. L. (2017). Traversing the valley of glycemic control despair. *Critical Care*, *21*(1). https://doi.org/10.1186/s13054-017-1824-9

Dudycha, G. J. (1937). An Examination of the J-Curve Hypothesis Based on Punctuality Distributions. *Sociometry*, *1*(1/2), 144. https://doi.org/10.2307/2785263

Greenhalgh, T., & Kyriakidou, O. (2004). Diffusion of Innovations in Service Organizations:

Systematic Review and Recommendations. *The Milbank Quarterly*, *82*(4), 581–629.

Heenan, D., & Birrell, D. (2006). The integration of health and social care: the lessons from Northern Ireland. *Social Policy & Administration*, *40*(1), 47-66.

ISD Scotland. (2019). *Cancer Statistics: Lung Cancer and Mesothelioma*. Retrieved from https://www.isdscotland.org/Health-Topics/Cancer/Cancer-Statistics/Lung-Cancer-and-Mesothelioma/

Kawulich, B. B. (2015). Gatekeeping: An Ongoing Adventure in Research. *Field Methods*, *23*(1), 57–76. Retrieved from http://fm.sagepub.com

Keefe, J. W. (2008). J-curve theory. In *Encyclopedia of Educational Leadership and Administration*. https://doi.org/http://dx.doi.org/10.4135/9781412939584.n303

King, G., Odonnell, C., Boddy, D., Smith, F., Heaney, D., & Mair, F. S. (2012). Boundaries and e-health implementation in health and social care. *BMC Medical Informatics and Decision Making*. https://doi.org/10.1186/1472-6947-12-100

Markham, S. K., Ward, S. J., Aiman-Smith, L., & Kingon, A. I. (2010). The valley of death as context for role theory in product innovation. *Journal of Product Innovation Management*, *27*(3), 402–417. https://doi.org/10.1111/j.1540-5885.2010.00724.x

Mehdi Jelassi, M., Trabelsi, J., & Turki, M. (2017). Does the J-curve hypothesis hold for a small open economy? Evidence from time-varying coefficients of a distributed-lag model for Tunisia. *International Economics*, *152*, 107–115. https://doi.org/10.1016/j.inteco.2017.06.002

Mills, J., Francis, K., & Bonner, A. (2008). Getting to know a stranger--rural nurses' experiences of mentoring: a grounded theory. *International Journal of Nursing Studies*, *45*(4), 599–607. https://doi.org/10.1016/j.ijnurstu.2006.12.003

Nancarrow, S., Booth, A., Ariss, S., Smith, T., Enderby, P., & Roots, A. (2013). Ten principles of good interdisciplinary team work. *Human Resources for Health*, *11*(1), 19. https://doi.org/10.1186/1478-4491-11-19

Øvretveit, J. (2015). How to Describe Interprofessional Working. In *Interprofessional Working for Health and Social Care*. https://doi.org/10.1007/978-1-349-13873-9_2

Rogers, E. M. (2003). *Diffusion of Innovations.* (5th ed.). New York: Free Press.

Snowden, A., & Young, J. (2016). *Evaluation of Improving Cancer Journeys*. London. Retrieved from http://www.macmillan.org.uk/about-us/what-we-do/evidence/research-publications/research-and-evaluation-reports.html

Snowden, A., Young, J., & Savinc, J. (2018). Proactive Community Support tailored to Holistic Needs: a Cohort Study. *Cancer Medicine*. https://doi.org/https://doi.org/10.1002/cam4.1709

Snowden, Austyn, & Young, J. (2017). A screening tool for predicting gatekeeping behaviour. *Nursing Open*, (March), 1–13. https://doi.org/10.1002/nop2.83

Stull, C. L., & Blue, C. M. (2016). Examining the influence of professional identity formation on the attitudes of students towards interprofessional collaboration. *Journal of*

Interprofessional Care. https://doi.org/10.3109/13561820.2015.1066318

The Scottish Government. (2016). *A national clinical strategy for Scotland*. Edinburgh.

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, *19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Trevatt, P., & Leary, A. (2013). Commissioning the specialist cancer nursing workforce. *Cancer Nursing Practice*, *9*(5), 23–26. https://doi.org/10.7748/cnp2010.06.9.5.23.c7815

Viney, D. (2005). *The Intranet Portal Guide: How to Make the Business Case for a Corporate Portal, Then Successfully Deliver*. London: Mercury Web Publishing.

Wener, P., & Woodgate, R. L. (2016). Collaborating in the context of co-location: A grounded theory study. *BMC Family Practice*. https://doi.org/10.1186/s12875-016-0427-x

West, E., Barron, D. N., & Reeves, R. (2005). Overcoming the barriers to patient-centred care: Time, tools and training. *Journal of Clinical Nursing*, *14*(4), 435–443. https://doi.org/10.1111/j.1365-2702.2004.01091.x

Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care ? A literature review. *International Journal Nursing Studies*, *45*, 140–153. https://doi.org/10.1016/j.ijnurstu.2007.01.015

Young, J., & Snowden, A. (2019). A qualitative study on the perceived impact of using an integrated community - based supportive cancer service. *Eur J Cancer Care*, (January), 1–9. https://doi.org/10.1111/ecc.13001