

Title

Service Evaluation: District Nurses' Experiences of Implementing a Caseload Profiling Tool to Caseloads in District Nursing.

Abstract

Currently, caseload profiling is being advocated as a method to measure, manage and evidence increasingly complex caseloads in district nursing. However currently there is no qualitative work on district nurses experiences of applying caseload profiling to their caseload. The aim of this service evaluation was to explore a working groups experiences of implementing a caseload profiling tool to caseloads in district nursing in one community setting. As part of the service evaluation three semi-structured interviews were conducted during meetings of the working group. Following data collection thematic analysis supported identification of three themes; barriers, facilitating factors and significance of data collected from caseload profiling. Subthemes were identified and compared with current literature and policy to enable new insights from practitioners to be gained. The service evaluation concluded that caseload profiling is a simple process that provides a return of rich complex data. With the data generated from the caseload profiles providing a method to evidence the complexity of district nursing caseloads and information to support proactive caseload management and identification of service delivery priorities.

Key Words

Caseload Management, Caseload Profiling, Community Nursing, District Nursing, Service Evaluation

Key Points

- Caseload profiling is a more robust method to measure, manage and monitor district nursing caseloads, compared to workload analysis methods.
- Caseload profiling is an easy process, providing a return of complex data to support caseload management and help identify service delivery priorities in district nursing.
- Caseload profiling provides information supporting more proactive caseload management and strengthening the public health aspect of the district nursing role.
- No barriers are evident with the use of caseload profiling and barriers relate to external factors that would be evident in the use of any workload measurement tool.

Reflective Questions

- What methods are used in your practice to measure, manage and evidence caseloads?
- Reflecting on these methods what are the strengths and weaknesses to the current approaches used in your practice?
- Considering the current methods do they help you with caseload management and allocation of resources?
- Comparing current methods what would the potential impact be of applying caseload profiling principles to your practice?

Introduction

Reflecting international trends, in all corners of the United Kingdom changing demographics of an ageing population has resulted in a shifting pattern of disease from acute illness to complex and multiple long-term conditions (Royal College of Nursing, 2014). Resultant policy drivers have been driving shifting the balance of care to the community and avoiding hospital admission as an international priority (World Health Organisation, 2010, Scottish Government, 2016, Department of Health, 2018, National Assembly for Wales, 2019,

Northern Ireland Assembly, 2016). Currently, district nurses (DN) are viewed as being ideally placed to deliver the policy agenda due to their position as the largest provider of nursing in the community (Royal College of Nursing, 2014).

Changing demographics and political focus challenge district nursing at a time of increasing caseload size and complexity with an ageing and reducing DN workforce (Royal College of Nursing, 2014). This is further exacerbated with scarce additional resources to meet these demands, with one uniting feature DN caseloads cannot operate waiting lists or become full (Haycock-Stuart et al., 2008). These challenges have resulted in increasing pressure for active management, monitoring and evidencing of DN caseloads (Baldwin, 2006). However district nursing and the delivery of care has always been a challenging activity to quantify, with currently no ideal universal method. Further confusion is evident in practice due to a plethora and interchangeable use of terminology and application of methods. To simplify, literature suggests the principles of caseload management provide a range of methods to support DNs to manage caseloads (Bain and Baguley, 2012). With two methods specifically focusing on monitoring, managing and evidencing of caseloads; workload analysis and caseload profiling (Figure 1)(Ervin, 2008).

Figure 1. Defining Caseload Profiling and Workload Analysis

Caseload Profiling	Workload Analysis
Caseload profiling is an analysis describing the total caseload managed by the district nurse, in terms of a number of variables, in an attempt to articulate the complexity and composition of the caseload. With an aim to help effective management and equitable resourcing of caseloads.	A process that compares patient's dependency from simple counting of caseload numbers to more complex measures, used to determine nursing time required, that is then compared with available nursing time, to establish if there is a deficiency or surplus of time (based on time and motion principles).

Source: Harper-McDonald & Baguley (2018)

In practice, some literature supports adopting workload analysis methods (Grafen and Mackenzie, 2015, Jackson et al., 2015). However this is contested by others with suggestions on the use of a mixed approach, encompassing workload analysis and caseload profiling (Reid et al., 2008), or caseload profiling being argued as the most robust single method (Baldwin, 2006, Thomas et al., 2006, Harper-McDonald and Baguley, 2018). Regardless of the methods applied DNs and their managers need a method to measure, monitor and resource caseloads. Currently, understanding on the application of these methods is heavily based on the expert opinion of those with managerial or educational roles and there is a need for more qualitative work on the direct experiences of caseload measurement from a DNs perspective (Harper-McDonald and Baguley, 2018). This article seeks to report a service evaluation that was conducted on the experiences of DNs implementing caseload profiling to their caseloads to address the current gap in knowledge.

Service Evaluation on Caseload Profiling

Within the Scottish context the current method to measure, monitor and resource DN caseloads is based on the principles of workload analysis and workload is measured on subjective self-reporting of professionals, time spent on tasks compared to hours worked, completed over 10 days, once annually (a time and motion study)(Grafen and Mackenzie, 2015, Scottish Government, 2013). While this provides some data on DN activity, within Aberdeen City Health and Social Care Partnership, this failed to adequately provide DNs and managers with sufficient caseload data to manage and resource the service. However locally the possible benefits of caseload profiling were considered a more suitable alternative and a working group was established to create and pilot a caseload profiling tool. The caseload profiling tool was based on the variables advocated in the literature (Table 1)(Audit

Commission, 1999, Bain and Baguley, 2012). Additionally data collection categories were standardised with NHS Scotland datasets (Scottish Government, 2013). The caseload data was entered into Microsoft Excel and provided a detailed monthly caseload profiling report.

Table 1. Variables of the Caseload Profiling Design

<ul style="list-style-type: none"> ▪ Demographic Detail (gender and age profiles) ▪ Geographical Detail (linked to the multiple areas of deprivation) ▪ Primary Diagnoses ▪ Interventions (broad categories and then sub categories) ▪ Patient dependency/weighting on caseload ▪ Caseload Throughput (admissions, discharges and changing interventions and dependency)
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Aims and Objectives

The service evaluation aimed to explore the working group's experiences of implementing a caseload profiling tool to caseloads in district nursing in one community setting. To achieve the aim the following objectives were considered:

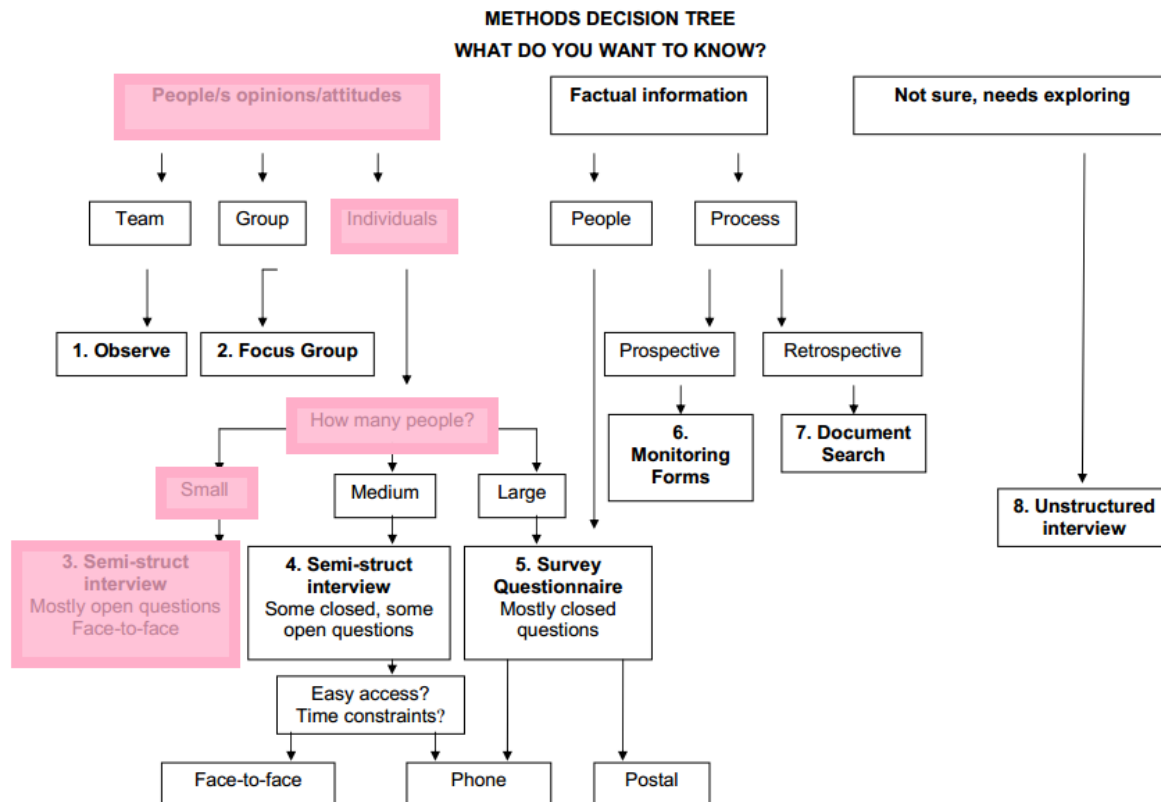
- Explore DNs experiences on the barriers to using a caseload profiling tool
- Explore DNs experiences on the facilitating factors of using a caseload profiling tool
- Explore DNs perceptions on the significance of data collected when using a caseload profiling tool.

Methods

A service evaluation is defined as an applied research method with a distinctive purpose to assess the value or worth of an intervention and a range of different data collection methods can be applied from either a qualitative or quantitative paradigm (Robson, 2011). As this service evaluation aimed to explore DNs experiences, a qualitative approach was most appropriate (Robson, 2011). To identify the qualitative method, the Cambridge

Method Decision Tree was applied (Marsh and Glendenning, 2005), identifying semi-structured interviews as the most appropriate method (Figure 2).

Figure 2. Cambridge Methods Decision Tree



Source: Marsh & Glendenning (2005 p.27).

A total of three semi-structured interviews occurred during meetings of the working group during the pilot implementation of the caseload profiling tool from January 2016 until March 2016. The purposive sample was informed by the working group membership and comprised two DN caseload holders and a senior administrator. The caseloads were representative of the local area, covering an equal geographical coverage of deprivation and affluence, and both city centre and suburban areas. Inclusion of an administrator was particularly relevant due to their extensive knowledge and involvement in data collection in district nursing. The semi-structured interviews were guided by an interview schedule, notes

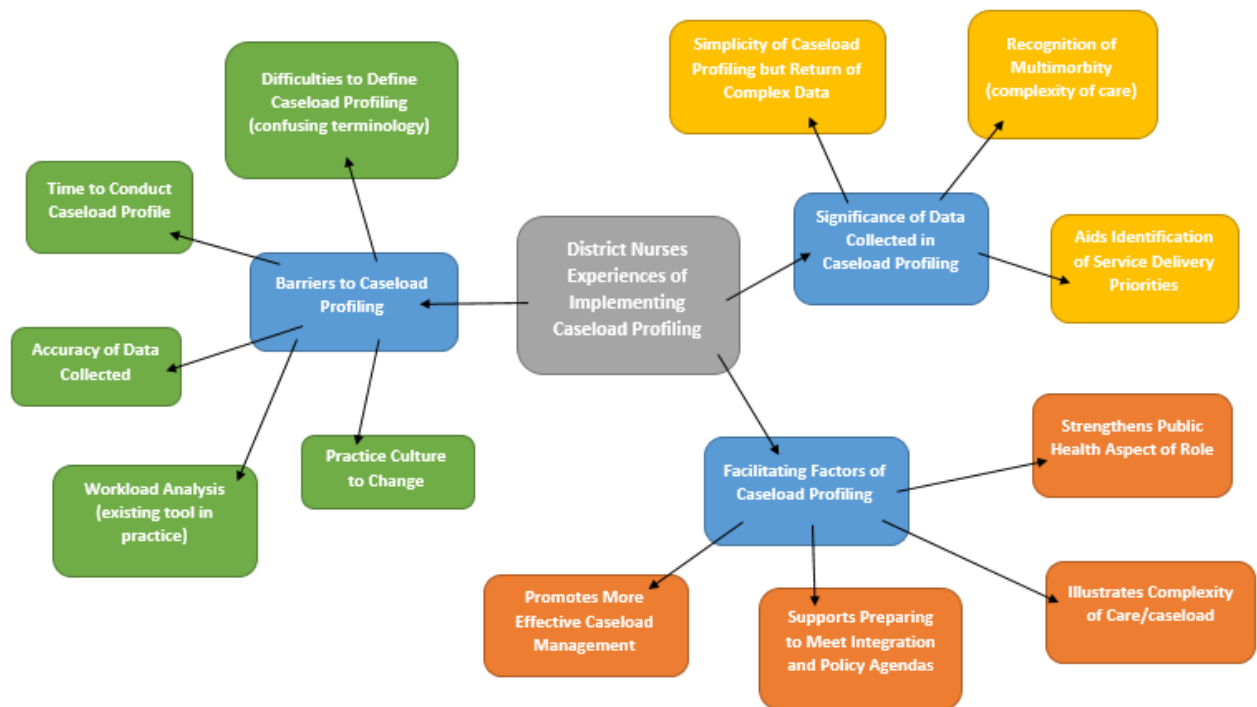
were taken and transcribed following the interviews. To ensure accuracy and credibility transcriptions were checked with participants (respondent validation) and while any dispute would be resolved in favour of the participant, no dispute occurred during the service evaluation.

Following the semi-structured interviews, thematic analysis was applied to analyse the data collected. Braun and Clarke (2013) define thematic analysis as an analytical method of data analysis in qualitative research, identifying, analysing and establishing patterns (themes). These themes can either be identified from data (inductive approach) or driven by the interest of the project (theoretical thematic analysis)(Braun and Clarke, 2013). A theoretical approach supported data analysis in this service evaluation, which saw themes and sub themes established, correlating with the service evaluation objectives. Permission to conduct the service evaluation was granted by the lead nurse and informed consent gained from colleagues on the working group. As a service evaluation is not classified as research, NHS Research and Development ethical permission was not required, however ethical approval was granted by the author's higher education institute ethical review panel.

Results and Discussion

Findings from the service evaluation will be discussed under the three themes; barriers, facilitating factors and significance of data collected in caseload profiling and compared to current literature and policy contexts (Figure 3).

Figure 3. Results – Themes and Subthemes Identified on Experiences of Implementing Caseload Profiling to Caseloads in District Nursing



Barriers to Caseload Profiling

Time

One major barrier to caseload profiling is the time required to conduct a caseload profile (Queens Nursing Institute, 2014, Ervin, 2008, Audit Commission, 1999). This was clearly evident in the service evaluation, with 10% of codes generated in the thematic analysis process attributed to this barrier. More specifically, there was recognition the impact of time was more prominently attributed to the initial population of the caseload profiling tool and ongoing profiling of caseloads would have less impact on time.

...the amount of time is the initial getting your caseload on the caseload profiling tool. Keeping it up-to-date is not going to be time consuming...

Additionally, it was identified utilisation of administration staff would be a facilitating factor to overcome this barrier. However this identified another barrier acknowledged by all members of the working group:

...The district nursing service has been starved of admin. Because they have all gone to the health visitors... this needs to improve with fairer distribution...

Evidently, reflecting the current literature, time is a significant barrier to implementing caseload profiling, mainly at the initial implementation stages. However despite recognition that increased administration support may alleviate this barrier, this is challenged with limited and competing demands on administration resources within district nursing and health visiting services that are under the same management structure in the local area.

Defining Caseload Profiling and Caseload Management

Currently in the literature there is interchangeable reference to the terminology on caseload profiling and caseload management, with no agreed definitions, resulting in confusion in practice (Harper-McDonald and Baguley, 2018). This was evident when exploring the working groups understanding of caseload profiling:

...I think knowing what is available in the community like support groups, incorporated with knowing what type of patients you have got are all part of caseload profiling...

Despite aiming to define caseload profiling, this definition aligns with defining community profiling (Jack and Holt, 2008). Despite at this stage providing the working group key defining terms, in subsequent interviews, the confusion over the terminology remained apparent:

...Caseload profiling well everyone gets confused. There is so many interchangeable terms that surround it...

Reflecting the current literature there is clearly a confusion in practice over terminology. Consequently this could be one contributory factor to why caseload profiling is seldom conducted in practice (Bain and Baguley, 2012, Thomas et al., 2006). Supporting this statement Ervin (2008) advocates a need to raise awareness and education of caseload profiling in practice. Additionally, this subtheme highlights the need for standardised language and clearer definitions on key terms surrounding caseload management.

Workload Analysis

As described earlier in this article, workload analysis is the data collection method used nationally in Scotland. There was a strong consensus disputing the application of this method by all members of the working group:

...We need a tool that goes beyond the current National Workload Tool. We know we are all busy and all the workload tool does is confirm this, with no way of quantifying why, this does not help identify what would help...

...I agree, it is an inadequate and unreliable tool failing to demonstrate the complexity of nursing care in the community. Or help you to manage your caseload...

In contrast one member of the working group expressed:

...Caseload profiling is much more representative than the terrible workload tool that tells you nothing. However it will be double work having to complete both...

Albeit a strong stance, it does clearly articulate the viewpoint of the working group on workload analysis method employed in the Scottish context. This aligns with suggestions

discussed above that caseload profiling provides a more reliable method compared to workload analysis methods, as it provides a more accurate measurement, and also supports effective caseload management (Reid et al., 2008, Brady et al., 2007, Thomas et al., 2006, Harper-McDonald and Baguley, 2018).

Accuracy of Data Collected

Currently, another suggested barrier to caseload profiling is DNs apply a protective, subjective and guarding nature to disclosing information on their caseloads, making it challenging to collect accurate caseload data (Bain and Baguley, 2012, Kane, 2008). This barrier was identified by the working group:

...Inaccuracies in reporting on caseloads is likely to happen. Historically it has always happened. If we use caseload profiling we rely on the district nurse to accurately report...

Additionally, Kane (2008) reports DNs may have incentives to falsify caseload data when completing a caseload profile. This was expressed as one concern of the working group:

...If people are worried about what the caseload profile may show, like a smaller caseload, they may rather than discharge a patient, keep them on, to keep their caseloads looking busy...

Kane (2014), Kane (2009), Kane (2008) implementation of caseload profiling resulted in redistribution of staffing and resources, highlighting one reason why DNs may attempt to maximise their caseload size. This concern was identified by the working group:

...Don't we need to be open and transparent that applying caseload profiling may alter staffing?...

...People need to stop being so protective of their own little area, it is a citywide service...

Despite concerns of the working group over accuracy of data reporting it was acknowledged future inaccuracies will become more apparent, due to the ability to compare caseload profiles collectively. Comparing of caseload profiles to identify inaccuracies and variations in practice is defined as caseload analysis (Kane, 2014). The method of comparing caseloads to aid identification of inaccuracies in data collection was articulated by the working group:

...If everyone is doing caseload profiling, it would become more apparent, differences in the profiles and easier to detect variation...

The working group identified variation in practice may highlight the need for discussion with the DN in a supporting capacity, as opposed to a disciplinary capacity:

...It informs a critical discussion where that manager can go to that district nurse to have a discussion. It is not giving that person into trouble, it is identifying variations in practice or problems that exist within that area...

Practice Culture

Although caseload profiling may have a benefit to the DN service, its application can be hampered by a resistance to change (Queens Nursing Institute, 2014). This was clearly evident in the service evaluation and resistance to change identified as a significant barrier hampering the implementation of caseload profiling and highlighting the need for effective leadership and change management skills:

...We need to challenge this constant resistance to change in practice...

...Everyone in practice always sees everything as a criticism, I do get it to a point, but there is a mind-set that just needs to change...

Summary

This theme has discussed barriers to caseload profiling comparing the current literature to the findings of the service evaluation summarised in Table 2.

Table 2 – Barriers to Caseload Profiling: Current Knowledge and New Insights

Barriers Identified in the Literature	Strategies Identified to Overcome Barriers	Barriers Identified in the Service Evaluation	Strategies Identified to Overcome Barriers	
Lack of awareness and training on caseload profiling and caseload management.		Confusion in practice on defining terms caseload profiling and caseload management.		
Lack of time, exacerbated by lack of caseload profiling tool and information technology to support data collection.		Lack of time to undertake a caseload profile.	Administration support.	
		Lack of administration support in district nursing service.	Explore distribution of administration resources within district nursing service.	
Workload analysis fails to provide a strategy to measure, manage and monitor district nursing caseloads.	Application of caseload profiling as an alternative.	Duplication of work with having to complete existing data collection methods based on workload analysis.	Caseload profiling seen as a more reliable and representative tool.	
Protective, guarding and subjective nature of data collection affecting accuracy.	Caseload analysis.	Accuracies of data collection (an issue regardless of caseload measurement strategy).	Compare caseload profiles collectively to identify variations (referred to as Caseload Analysis)	Supportive discussions with caseload holders where variation is detected.
Resistance to change.		Resistance to change due to practice culture.	Effective change management and clinical leadership skills.	
Legend/Key				
	Represents findings from existing literature and the findings of the service evaluation where comparable relationships were evident.			
	Represents where new insights have been identified from the service evaluation.			

Facilitating Factors to Caseload Profiling

Complexity of Care

As discussed earlier in the article measurements focusing on workload analysis (quantitative in nature) are inadequate in illustrating the complexity of the DN caseload (Kane, 2014, Brady et al., 2007). A viewpoint supported by the working group:

...Just having a number doesn't tell you anything... You could have 50 patients with multiple needs on one caseload, compared to a caseload of 150 with one need... and the smaller caseload is more complex...

Alternatively it has been suggested caseload profiling would provide a strategy to overcome limitations in historical workload analysis methods and illustrate the complexity of care using more qualitative measures (Baldwin, 2006, Thomas et al., 2006). Within the service evaluation a consensus supporting the above claim was observed:

...Caseload profiling for me is looking in a more analytical way, quantity and quality, not just how many patients you have but what is involved with those patients in much more detail...

Promoting Effective Caseload Management

It is suggested applying caseload profiling to practice results in increased performance of the DN (Kane, 2008, Reid et al., 2008, Audit Commission, 1999). This was supported in the discussions of the working group:

...Before caseload profiling, I would perhaps see that patient, as a patient with a wound... but now I see their diagnosis... have I looked into that... have I cared for that...you can anticipate future care needs...

...For me caseload profiling may open up opportunities to match resource and skills to patient's needs, as well as identifying training needs of the team...

These quotes illustrate a facilitating factor of caseload profiling, where it supports the DN to lead their team effectively to meet and anticipate patients' needs. Additionally, mirroring the literature these quotes also suggest caseload profiling enabled the DN to deliver more equitable distribution of resources to those in the greatest need and help reduce inequalities in healthcare delivery (Bain and Baguley, 2012, Audit Commission, 1999).

Integration and Policy Agenda

The introduction of the caseload profiling tool occurs at a time of significant change, redesign and blurring of roles as policy agendas advance across the United Kingdom. Specifically, in the Scottish context where the integration of health and social care becomes a reality (Scottish Government, 2016). The working group identified the information gathered from the caseload profiling tool is vital to evidence the work and contribution of district nurses:

...We have not mentioned integration yet... this is going to be critical information for integration...

The above quote highlights the importance of the DN service being able to articulate and evidence their caseloads and remit of services they deliver as the policy agenda continues and the service and roles change.

Public Health Aspect of District Nurse's Role

Current literature suggests one weakness of caseload profiling is its failure to acknowledge the public health aspect of the DN role (Harper-McDonald and Baguley, 2018). Due to

awareness of this weakness when the caseload profiling design was created locally it encompassed a method to categorise patients in relation to the Scottish Index of Multiple Deprivation, classifying patients according to affluence or deprivation (Scottish Neighbourhood Statistics, 2012), viewed as a facilitating factor by the working group:

...It is pertinent to compare my patients to affluence or deprivation... because their lifestyle choices can have an effect on their health... i.e. wound healing... these patients need more support. And with easy recognition I can target the support. And help reduce inequalities...

This quote would indicate how application of simple measures within the caseload profiling tool has contributed to the acknowledgment of the DNs role in public health and helping to meet government aims of reducing inequalities in healthcare. It could be suggested as important to consider these measures and others potential measures in future caseload profiling designs.

Summary

This theme has discussed facilitating factors to caseload profiling comparing the current literature to the findings of the service evaluation summarised in Table 3.

Table 3 – Facilitating Factors to Caseload Profiling: Current Knowledge and New Insights

Facilitating Factors Identified in the Literature	Facilitating Factors Identified in the Service Evaluation
Powerful strategy to comprehensively articulate caseload composition.	Articulates the complexity of care being delivered by district nursing teams.
Strategy to promote reflection and analysis on caseloads.	Increased analytical and reflective approach towards caseload management.
Increased performance of the caseload holder.	More proactive patient focused management of the caseload.
More equitable distribution of resources due to caseload profiling providing a strategy to set priorities and coordination of caseload. Ensuring that resources are targeted to those in the greatest need.	Caseload profiling provides information to match resources and skills to patient's needs.
	CP provides detailed information and evidence on caseloads and remit of district nursing service, of particular benefit moving forward into an integrated service.
	Simple methods can be included into caseload profiling designs to aid integration of the public health aspect of the district nursing role.
* All the above facilitating factors are suggested to result in a reduction of caseload numbers.	
Legend/ Key	
	Represents findings from existing literature and the findings of the service evaluation where comparable relationships were evident.
	Represents where new insights have been identified from the service evaluation.

Significance of Data Collected in Caseload Profiling

Recognising Multimorbidity

One negative aspect of applying the caseload profiling tool, identified by the working group, was its failure to capture data from patients with multimorbidity:

...I don't like the primary diagnosis on the tool. It only has one. It fails to recognise multimorbidity. All my patients or most have multimorbidity. I have an issue with this. It doesn't represent my caseload...

Although the above quote articulates a failure of the caseload profiling tool, in fact it exposes a failure on the current data collection requirements of the government (Scottish Government, 2013), where there is no requirement to report more than one long-term condition. Locally the caseload profiling tool was adapted so all patient conditions could be recorded, enabling a more accurate reflection on complexity of care being delivered by DN teams. Although beyond the scope of this service evaluation to address concerns in government data reporting requirements, it is important to remain aware of this issue.

Identifying Service Delivery Priorities

One significant factor identified by the working group of the data collection in caseload profiling relates to how this can help identify issues in service delivery, and highlight service delivery priorities.

...I think the information that can be gained is immense with caseload profiling it helps explain what we are doing...

...We want our managers to see our profiles and what we do, we are busy but not always easy to explain why...

These quotes contradict the current views in the literature, where it is suggested a protective and guarding nature is applied to reporting caseload data (Kane, 2008, Bain and Baguley, 2012) and in fact the main issue is challenges in DNs articulating their work. Importantly this viewpoint is from the respective author's opinion who held management or educational roles. Therefore new insights have emerged for DNs indicating they want transparency of their caseloads, and sharing the findings of caseload profiling with management could articulate problems faced by the DN and the DN service:

...It can highlight to service managers problems that are happening... and this gives them the evidence that means they have to do something about it and...

...The service managers are excited with the data the caseload profiling tool captures... this is data we have never had before...

These above quotes from the experiences of the working group substantiate the current literature, where not only is caseload profiling viewed as a tool to ensure even distribution of resources, it provides evidence when seeking additional resources or competing to maintain funding (Kane, 2008). This was further evidenced:

...At the moment when our managers are trying to source additional resource, they have no evidence, they can only say we are busy... that's not enough...

Simplicity of Caseload Profiling

One of the significant factors of the data collected can be attributed to the simplicity of applying caseload profiling principles to DN caseloads, despite returning complex and informative data:

...So simple and usable...Yet such effective and useful results...

This subtheme challenges the literature where it is argued the lack of caseload profiling tool and investment into IT solutions has contributed to difficulties in conducting caseload profiling (Thomas et al., 2006, Audit Commission, 1999). New insights have been gained during the service evaluation, which indicate that when the working group applied a caseload profiling tool, using a simple self-created Excel program, caseload profiling was simple and effective providing rich and informative caseload data.

Summary

This theme has discussed the findings of the service evaluation on the significance of data collected as a result of caseload profiling is summarised below:

- Caseload profiling is a simple process returning complex and informative data.
- Identification of issues within service delivery, enabling service delivery priorities to be identified.

Limitations

One limitation of using semi-structured interviews was the effect the researcher can have on the participant (Robson, 2011). This is more apparent in small scale projects, such as this service evaluation, where if participants are known to the 'researcher'. The researcher effect became apparent at the start of the service evaluation, when one participant stated:

...Well what I think your vision is...

Indicating because the participant knew the author, their response aimed to reflect the author's viewpoint and not their direct experiences. In order to address this limitation the following procedures were applied, reinforcement was made to the working group that the aim of the service evaluation was to gain their experiences. Additionally, to ensure an accurate account and interpretation of participants' viewpoints transcriptions were checked with participants (respondent validation).

Conclusions

This article has explored a working group's experiences of introducing a caseload profiling tool to their caseloads and compared with current literature to help gain new insights. One important observation can be concluded; no barriers identified relate to caseload profiling, and barriers relate to external factors which would be evident on the application of any new

process in practice. It could be recommended it is important to remain cognisant to the issues around lack of standardised definitions/language and the interchangeable use of terms within literature that causes confusion in practice.

During this service evaluation it became evident that DNs have previously struggled to evidence their work and the complexity of their caseloads. However caseload profiling provided a method to help DNs articulate the complexity of care being delivered and use this information to more proactively manage their caseloads and support the public health aspects of the role. While there was issues with the time required to apply caseload profiling to practice it was clearly identified caseload profiling is a simple process, providing a return of complex data to support the DN in managing a caseload and helping identify service delivery priorities. These insights from this service evaluation may be of benefit to both DN and managers on benefits, barriers and factors that facilitate implementing caseload profiling or similar workload tools to caseloads in district nursing. Overall the objective of this service evaluation has been met and the author would provide a concluding statement to support caseload profiling in practice:

Caseload profiling provides an effective method in providing a strategy to articulate, monitor and manage increasingly complex caseloads in contemporary district nursing practice.

Following this service evaluation it is recommended that in practice there is further implementation of a caseload profiling tool and that a full evaluation after further implementation is conducted. Specifically this evaluation can explore the impact of the identified strategies to overcome barriers to caseload profiling. In addition to practice recommendations, further research would be valuable to explore the work and contribution of DNs that was identified as being difficult to articulate by DNs themselves.

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