Role Development: Community Matrons

Quality Impact *Evidence Summaries*

Measurable evidence of the impact of policy interventions on quality

A rapid evidence review for

The Health Foundation

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research matters

Quality Impact *Evidence Summaries*

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About Quality Impact *Evidence Summaries* (QI*ES*)

Quality Impact *Evidence Summaries* (QI*ES*) present measurable evidence of the impact of policy interventions within the NHS. Distinctively, impact is viewed through the lens of quality, using the Institute of Medicine (IOM) domains of quality as a framework.[1]

QIES began as a series of structured reviews featured in A Clear Road Ahead, a 2016 Health Foundation project delivered in collaboration with Professor Sheila Leatherman, to shape a quality strategy for the NHS.[2] The Health Foundation re-commissioned Research Matters in 2017-18 to develop the structured reviews further, with the aim of exploring the potential to develop a sustainable tool or service to support and promote evidence-based policy and decision making across the NHS in England.

Scope

QIES focus exclusively on national policy interventions in the English health care sector. Typically, these are centrally developed by the Department of Health, NHS England or other national bodies and rolled out nationally, albeit with local variations in implementation. Some interventions may have initiated at a local or institutional level and been adopted nationally. The time period for both policies reviewed and evidence used is from 1997 onwards.

NHS Taxonomy

As the scope and volume of relevant policy interventions is significant, a Taxonomy of Policy Interventions for the NHS in England was developed. Policies are grouped into four policy areas - governance, finance, delivery and improvement - split further into focus areas. Groups of policy interventions combine as policy levers, which forms a thematic basis for a series of QIES. Each individual QIES focuses on a single policy intervention as an example of the use of that policy lever. This enables groups of policy interventions which share conceptual or practical similarities to be described alongside each other, allowing for comparison about what works.

For further information, see the separate working paper: *Taxonomy of health care policy interventions for the NHS in England, Working paper for Quality Impact Evidence Summaries (QIES) project*, February 2018.[3]

Impact on quality

In assessing and presenting the impact on quality of policy interventions, we have used the Institute of Medicine (IOM) framework for the quality of health care.[1] This describes six domains (or aims), across which improvements in quality can occur. These are:

- **Safe:** avoiding harm to patients from the care that is intended to help them.
- **Effective:** decision-making and service provision based on clinical and scientific evidence and knowledge, as well as refraining from providing services to those not likely to benefit (avoiding underuse and misuse, respectively).
- **Patient-centred:** providing care that centres on the patient, respecting and responding to individual patient preferences, needs, and values and ensuring the patient is in control.
- **Timely:** reducing waits and delays for both those who receive and those who give care.
- **Efficient:** providing care that is cost-effective and avoids waste.
- **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Evidence about a policy intervention is reviewed and findings which show impact against one or more domain of quality form the basis of results gathered and presented in a QIES. Assessments of the level of impact within each domain are made: impact on quality can be positive, uneven and can also be unintended.

Methodology
QIES identify the key and most relevant evidence, only where measurable impact on quality is demonstrated, resulting in a sufficiently secure evidence base for conclusions to be tested and drawn. The approach is time-limited and pragmatic and is not intended to be comprehensive or meet the academic standards of a systematic review.

For each policy intervention, a structured search of published literature is conducted using, key databases, such as NHS Evidence, PubMed and Cochrane Library, as well as relevant sources of grey literature and stakeholder reports. Searching combines database searching, reference scans, looking at recommended studies/authors and targeted desk research. Full texts of reports and studies are obtained and viewed for the majority of studies, but sometimes the abstract provides sufficient information.

A discussion of the evidence used describes the key sources used to produce the QIES, including the number of relevant studies and different evidence types. Results are presented thematically, based on the IOM domains and describe the measurable impact of the policy intervention on aspects of quality of care in the English NHS. This is supported by a summary table with judgements about the strength of the impact for each IOM domain.

About Research Matters
Research Matters is a small, well-established research company delivering high quality, client-focused research to tight time-scales for clients across many sectors. Our work is bespoke, pragmatic and insight driven and our style is always friendly, flexible and professional.

We have completed a number of rapid evidence reviews for the Health Foundation, as well as developed a methodology for Quality Impact Evidence Summaries and an NHS taxonomy to facilitate a structured approach to producing of evidence reviews. Most recently, we have completed a review on retention in the health and social care workforce.

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Role Development: Community Matrons

In this Quality Impact Evidence Summary (QIES), we examine the impact on quality of the community matron role. This policy intervention sits within the policy lever of Role Development within the NHS Taxonomy.

NHS Taxonomy: Positioning of Policy Intervention

Policy area	Policy focus	National policy levers
Governance		
Finance		
Delivery	Service provision	
	Workforce strategy	Workforce planning
		Role development *Adjustments to NHS roles, including developing existing roles, task shifting and creating new roles*
		Team-based-working and collaboration
	Patient involvement	
	Public health programmes	
Improvement		

Related QIES within the policy lever of Role Development are: Emergency Care Practitioners, Modern Matrons, Cancer Clinical Nurse Specialists, Physician Associates and Clinical Pharmacists.

Description of intervention

Role description

Community matrons are experienced nurses, with advanced clinical practice skills, who use case management techniques to support patients with long term conditions (LTC) in the community. The underlying principle is that timely, proactive care can minimise or prevent some acute exacerbation and therefore reduce unplanned hospital admissions. They provide a single point of care, education, support for self-management, close surveillance and co-ordination of health and social care services for patients on their caseload. Core competences were defined in *Case Management Competencies Framework for Care of People with Long Term Conditions*.

Policy context and implementation

The introduction of community matrons was in response to centrally imposed targets addressing the cost to the NHS of unplanned hospital admissions of people with LTC. First described in *The NHS Improvement Plan* in 2004, the new clinical role for nurses in England was fully expanded in *Supporting People with Long-term Conditions: An NHS and Social Care Model to Support Local Innovation and Integration* (2005). This included a mandated target of 3,000 community matrons by 2007, in support of the Public Service Agreement that set out a 5% reduction in emergency hospital bed usage by people with LTC by 2008.

In 2003, the Department of Health in England established pilot sites in nine Primary Care Trusts to trial the North American Evercare model of case management. This became the prescribed model of care for the community matron role, although not all services adopted this. The pilot and early evaluations of the Evercare model did not make a strong case for the community matron role, whilst there were a range of issues with implementation of the

policy and poor levels of recruitment.[4] As a result, the 3,000 target was not achieved (only 1,348 were in post in England by 2007) and was removed and the focus on the role was seemingly dropped from policy directives.[5]

However, support for the role has continued to develop at a local level. Community matrons remain part of the community nursing workforce,[6] with 57% of district nursing teams retaining a community matron (2013)[7] and overall numbers remaining at fairly consistently at 1,200-1,300 – in August 2015 there were 1,214 community matrons in England.[8] The role is still included the NHS England *Framework for commissioning community nursing* (2015).

Funding

The community matron role was not backed by specific funding allocations or clarity over where funding would come from. One study notes that funding came from varying local sources, such as extra funding from a Primary Care Trust, or short-term project funding from a Strategic Health Authority.[5] It is clear that for the most part, the new roles were recruited from in-service, mostly from district nursing services, resulting in pressure on this service.

Discussion of evidence

21 relevant studies were identified as reporting directly on impact on quality, which together form a significant body of relevant evidence. Studies were published between 2006 and 2014, with a cluster in 2008-09, providing a range of evidence from implementation to the intervention becoming embedded and evaluated.

The early pilot evaluation,[4] and subsequent national policy evaluation[9] (both 2006) of the Evercare model of case management drew early conclusions about unproven impact on government targets for unplanned admission. Useful later reviews included a literature review of role community matron (2009)[10] and two NIHR reviews on broader areas (nursing of chronic conditions and case management) which covered the role of community matrons and included literature reviews and new evidence (2010).[11,12] Two related studies evaluated patients perspectives based on survey results from ~100 patients.[13,14] The majority of evidence was from small, qualitative studies and single site evaluations including Cornwall,[15] Blackburn,[16] Leeds,[17] Coventry.[18]

A number of studies, including the early evaluations, highlighted the methodological difficulty of evaluating complex interventions against simple measures.[9,10,19] One commentary summarises that: "*evaluating community matron services is complicated by the implementation of different service models, confusion over definitions, varying care delivery settings and the use of different outcome measures to assess case management effectiveness*".[20] In addition, the focus on the case management model of care, seen in some studies, including the feature of prescribing caseloads of ~50 patients,[21] appears to have distorted findings on the impact by community matrons.[22]

Smaller qualitative evaluations gathering patient and practitioner views showed high levels of patient and carer satisfaction with community matrons and highlighted examples of good practice. The combined evidence from these studies presented consistent findings, but were more anecdotal and did not deliver a robust whole-system view. These were also more likely to be positive because of the significant benefits experienced and articulated by patients.

Gaps in the evidence

Satisfactory measures of the impact on hospital admissions were lacking in the evidence reviewed, but evaluations highlighted a number of reasons for this:

- Lack of comparable admissions rates before and after the community matron became involved with the patients.[14]
- Lack of adequate information systems to monitor case managed patients as a group, track admissions and better planning and development of services.[9,12]
- Difficulties and variance in selecting high risk patients to be case managed as a distorting factor.[4,23]
- Wide variations in investment and implementation locally and nationally.

The NIHR study highlighted concerns about using hospital admissions as a key measure of the community matron's impact, because of limitations with data tracking case managed patients.[12] Similarly, the original Evercare evaluation

noted that "*the single metric of examining hospital admissions may not be suitable for complex and vulnerable patients where many other factors contribute to the need for hospitalisation*".[9]

Qualitative studies identified a broader range of impacts, many of which were addressed across the evidence base. However a more robust view on patients' experience and perspective was missing from the evidence seen.

Evaluations did not address the key question of whether the investment into this model of care was worthwhile or cost-effective. Some impacts were evident in qualitative findings, such as impacts on primary care, improvements in the primary-secondary care interface, and quality of life, but these were not enough to sufficiently counter the prevailing view of limited impact on the stated aim of reduced hospital admissions.

Strength of evidence
Evaluations reviewed were robust in their approaches, but for the most part, were small in scale and not directly comparable. There was heavy reliance on qualitative data and analysis, which was somewhat anecdotal and may exhibit bias from the significant personal benefits experienced by patients. No statistically significant effects were seen. Evidence would benefit from more quantifiable, generalizable or system-level investigations. For these reasons, the evidence was viewed as useful for commissioners and policy makers, but only moderately secure.

Impact on quality
The evidence reviewed showed that community matrons had a range of positive impacts across the domains of quality. The role demonstrated most impact on effectiveness and was seen to be highly patient-centred, with additional positive impact on timeliness and access to health services. Along the dimension of efficiency, which was the initial policy focus of the intervention, impact proved harder to measure and the evidence was less clear.

Safety
Safety did not feature prominently in evaluations of the community matron role, although medicine reviews and adjustments to medication management were noted,[18] with the Evercare evaluation citing examples of alterations that may have prevented adverse reactions.[9]

Effectiveness
Identifying evidence of direct impact on clinical outcomes was challenging. One single-site study was able to link the role with achieving an average of 90 Quality and Outcomes Framework indicators per month, which could be interpreted as contributing significantly to improved outcomes for patients with LTC.[15]

A number of qualitative evaluations supported positive impact on health and quality of life.[4,19] One study reported patient views that community matrons improved their health.[13] Elsewhere, patients highlighted improvements in several areas including "*better quality of life, improved physical health such as improved diabetic control or better chronic obstructive pulmonary disease (COPD) management, better mental health.*"[23] As a result, "*patients felt better directly as a result of the service.*" A positive social effect was also noted,[22,24,25] with a specific improvement in psychosocial support.[26]

Impacts on service outcomes were noted across many evaluations, along a number of dimensions:

- Improved clinical skills and interventions: in the largest (~100) patient survey "*patients gave many examples of how community matrons used their clinical skills to deal with symptoms, which were affecting their quality of life and made these more manageable*".[13] Other studies showed how patients valued the matron's clinical skills and thorough clinical management of their conditions; [10,23]
- More appropriate care: better referrals and use of other services were highlighted in a number of studies,[11] with references to patients having needs met more appropriately;[27]
- Improved continuity of care: A number of evaluations emphasised the positive effect on continuity of care for the LTC patient population, noting the benefits of a single point of access, improved links with GPs and between primary and secondary care.[28] As a result, "*all professional groups perceived such co-ordination of care as benefiting patients*"[22] and "*the continuity of care provided by a single highly skilled professional may be*

a more appropriate way of providing quality care".[23] Equally, carers valued the coordination role of the community matron.[19]

Efficiency

The defining issue of whether community matrons achieved the policy aim of reducing hospital admissions was the focus of many evaluations. Early evaluations of case management by community matrons saw no statistically significant effect on reducing unplanned hospital admissions.[9]

However, there was evidence from smaller scale settings and groups that admissions were averted, to varying degrees. The pilot evaluation found "*examples of admissions which had been avoided, but no overall effect on admissions.*"[9] Other studies of single sites and defined locations cited impact on admissions, with quantifiable (but not comparable) improvements:

- Blackburn: 67% reduction in emergency admissions from patients on the community matron's caseload;[16]
- Coventry: 139 avoided admissions logged during their first year, leading to the assertion that "*the community matron service strongly supports that they are successful in averting avoidable admissions;*"[18]
- Cornwall: consistently fewer hospital admissions per month (average of 33 reductions) and a 59% decrease in usage by very high impact users;[15]
- North East PCTs: 44% of patients said they were spending less time in hospital.[24]

Qualitative studies frequently reported patients views that the new model of care had an impact on emergency admissions, [17,23,24,28,29] whilst studies reflecting the views of the matrons highlighted a perceived reduction in unnecessary admissions.[18,27]

There was evidence of impact on usage of other services, particularly GPs. "*Community matron was also seen as removing the need to access other resources such as routine visits to the GP - the majority of service users stated that they were unlikely to contact a GP about any problems associated with their LTCs, rather they would use the community matron as first contact.*"[11] Studies also highlighted reduced GP workload or were able to report actual reductions.[9,16,23,25] One was able to imply a potential 61% reduction in GP visits and 90% reduction in 999 calls,[13] whilst in Cornwall, an average of 459 GP contacts a month were saved, with home visits reduced by 61%, surgery appointments by 58%, telephone contacts by 74% and number of out-of-hours visits by 62.5%.[15]

Community matrons were seen as expensive. One analysis suggested that costs per listed patient, at £1,237, were at least ten times higher for community matrons than for nurses conducting similar functions in other settings.[11] One literature review noted that "*savings are hinted at and are therefore more implicit than explicit in many of the studies.*"[26] Again, a single site study was able to conclude that avoided admissions amounted to £152,000 savings over a year, as well as identifying reduced costs in other areas, such as medication reviews. Another early audit of a service identified £25,000 cost savings in the first five months.[5] However, evaluations did not fully address the issue of cost-effectiveness, with one review summarising "*there are still no reports that give insight into whether the considerable investment into this model of care is worthwhile or cost-effective.*"[23] Another concluded that it is "*unclear whether the role is financially viable in its current form.*"[22]

Patient-centred

Studies overwhelmingly reflected a positive impact by community matrons from the perspective of patients and carers, with high levels satisfaction.[9–11,13,17–19,29] Different patient-centred effects were highlighted across studies, but most prevalent were the following themes:

- Understanding of individual experiences and needs: One study found "*the greatest impact was a result of the community matron relating to them as a whole, rather than just tackling a single disease, something that they had experienced during hospital appointments*".[15] Studies also reflected patients appreciation of "*understanding of their individual experiences of LTCs*"[13] and described the approach as "*holistic".* [23,25]
- Confidence to self-manage: many studies highlight increased confidence from patients as a benefit, with one finding that 24% patients felt more confident.[24,28] Community matrons were seen to "*give patients confidence*

that their conditions could be managed"[13] and help them feel "*more confident in being independent and in looking after themselves.*"[17]

- Involvement: one study recorded 98% satisfaction with increased involvement in their own care[13] and in another, 73% of patients strongly believed they were involved in their own care, meaning that "*they had more options open to them and their opinions were genuinely sought*".[24] Other studies drew out an increased sense of control, with one describing patients as "*more in control of the condition and life, as a result of some of the interventions the community matron had put into place*".[13]

Other aspects mentioned were improvements in communication and advocacy,[25] increased focus and support,[11,25] as well as value for the caring aspect of the community matron role.[23] Positive impacts for carers were also noted,[9,17,19,27,28] who felt supported and were relieved of aspects of the caring role. The positive response from patients was described as an *"implementation surplus*" because this aspect of the community matron role was not anticipated or an objective of the intervention.[23]

Timeliness

More frequent contacts, regular monitoring and responsiveness in a crisis, were features of a positive impact on timeliness by community matrons.[4,9] In one study, patients reported that "*the matron was always 'at the end of the 'phone' and always responded quickly to concerns*,"[13] whilst in another, the community matron "*appeared to save time and offered a quicker appointment than the traditional GP route*".[25]

Equity

Evaluations suggest that the community matron model was effective in supporting high levels of comorbidity and complex care, implying a positive impact on access to care and therefore equity. One single-site study concluded that the model "*made a significant improvement to patient care for this particularly vulnerable group of patients.*"[18] An NIHR study concluded that "*community matrons were meeting the needs, often against the odds, for the most vulnerable patients.*"[5] In particular, studies found that community matrons were "*perceived to improve links to other healthcare services… therefore enabling easier access to such services*"[25] and were "*helping patients to navigate the whole system, either vicariously by organizing other services for them, or by information giving to the service user or relative.*"[11] Another study could point to a 90% improvement in access to other services.[16]

Differences in local prioritisation and implementation of the mandated community matron target led to "*slow, uneven and limited establishment of CM posts across England*",[5] implying a lack of equity across the country. Another study noted the effect of variable criteria for inclusion in community matron caseloads, as well as variation depending on the LTC.[27]

Other impacts

The Royal College of Nursing noted the likelihood that the policy focus on increasing numbers of community matrons had an effect on the decline in numbers of district nurses.[30] Implementation issues were widely discussed in the evidence reviewed, but are not described in detail here.

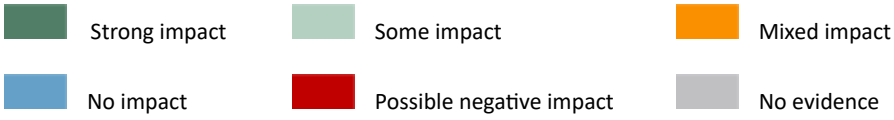
In summary …

- Community matrons had a positive effect on patient-centredness, delivering care with high regard for patient need, involvement and self-management and meeting with high levels of patient satisfaction.
- Community matrons were effective along a number of dimensions, including improved quality of life, improved clinical skills and interventions, and more appropriate care. Impact on clinical outcomes was difficult to assess, but care of a hard-to-reach, vulnerable group of patients was seen to be effective and indicated a further positive impact on equity.
- A reduction in hospital admissions, the key policy focus, was not demonstrated, but efficiencies in other areas were observed in single site studies, particularly a reduced burden on GP services. Overall cost-effectiveness was not addressed, apart from acknowledgement that the role was expensive.
- Impact was more notable at a local level, with system level impact more difficult to quantify and reflect.

- The policy focus on the community matrons was dropped based on early evaluations, which emphasized the impact on unplanned hospital admissions over other positive effects, and problems with implications, many of which were avoidable. Evaluations that took a longer view seem able to draw more useful conclusions.

Summary of evidence of impact on quality: Community Matrons

Domains of quality	Impact
Safe	• Not a prevalent theme • One reference to medication adjustments avoiding adverse reactions
Effective	• Effect on clinical outcomes not measured, but one study attributed 90 QOF indicators per month to community matrons • Strong qualitative evidence for improvements to health, social support and overall quality of life • Indications of improvements to service delivery and quality of care, including improved clinical skills and interventions, more appropriate care and improved continuity of care
Efficient	• No system wide impact on hospital admissions • Many examples at local level and perception from patients and practitioners that hospital admissions were reduced • Cost effectiveness not fully addressed, but examples of savings were seen • Reduced and improved use of primary care/GPs seen in some settings
Patient-centred	• Strong positive impact and high levels of patient satisfaction • Improvements in responsiveness to patient needs, confidence to self-manage and greater involvement and control • Further positive impact for carers
Timely	• Saved time • More frequent contacts, regular monitoring and greater responsiveness
Equity	• Improved access for vulnerable patient population
	• Uneven implementation and differences in allocation of patients
Strength of evidence	• Useful for policy and commissioners deciding whether to develop or implement, but only moderately secure • Evidence reviewed drawn from 21 studies
Funding	• No central funding allocation • Paid for locally, by different means



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