

Institution: University of Strathclyde

Unit of Assessment: 3

Title of case study: Improving palliative care through better engagement of community pharmacies.

1. Summary of the impact (indicative maximum 100 words)

The research has led to the design of a new clinical pharmacy service model, centred on community pharmacies, to improve the care of patients with palliative care needs living in the community. This resulted in better provision of information for patients (and their carers) and new training resources and staff development opportunities for the multi-disciplinary palliative care team. Funding has been secured to rollout the new service across NHS Greater Glasgow and Clyde Health Board (NHS GGC – 1.2M population) in 2013. The research has also supported a successful bid to explore the service model in a remote and rural Health Board (NHS Highland) and has informed specific programmes of Macmillan Cancer Support UK, pharmacy workforce planning, and the Boots Macmillan Information Pharmacists initiative.

2. Underpinning research (indicative maximum 500 words) **Context**

Palliative care is defined as an approach that improves the life of patients dying from progressive or incurable conditions and their families/carers. It is an integral component of healthcare with 55,000 deaths in Scotland each year, the majority following a period of illness or frailty. In NHS GGC, there is an estimated 10,500 people annually who require access to palliative care services. In 2009, a NHS GGC report found that whilst the majority of patients' palliative care needs were met gaps in service delivery, notably around timely access to medication, still existed. Consequently, in 2009 Macmillan Cancer Support in collaboration with NHS GGC appointed a team including four Macmillan Pharmacist Facilitators, aligned to defined local community health care partnerships (CHCP), to design and delivery a new clinical pharmacy service, centred on local community pharmacies (~35 patients with palliative care needs and their carers will normally access a community pharmacy annually).

Prof Marion Bennie with colleagues secured funding from Macmillan Cancer Support, following competitive tender, to support the development and evaluation of the new model of service provision (2010-2011) and extend the limited literature on clinical pharmacy palliative care services in the primary care setting.

Key research findings.

The research has evidenced for the first time in NHS Scotland a conceptualised clinical practice model and capacity planning framework for community pharmacy palliative care services. The research comprised of three key phases of work [ref 3]:

Phase 1 - Involved the characterisation of palliative care services in the four CHCPs (total population ~430,000) through a self-completion questionnaire (112 Community Pharmacies [CP] and 107 General Practices [GP]) and a series of focus groups and interviews (51 health care professionals, 21 patients/carers) [ref 1]. The findings identified a range of issues and gaps:

- Variable communication between health care professionals, and across health care settings (e.g. difficulties for community pharmacies to fulfil prescriptions timeously, particularly of pain medication)
- Absence of concise and up-to-date palliative care resources and information for health professionals and patients (e.g. gaps in GPs' knowledge of palliative care medicines used in uncommon indications and unusual strengths)
- Limited patient/carer knowledge regarding the prescription and supply of some palliative care medicines (e.g. conditions surrounding supply of controlled drugs).

Phase 2 - The findings informed the development of a quality improvement programme implemented by the Macmillan Pharmacist Facilitators focused on three key areas:

Development of information resources for patients/carers and the multidisciplinary team [ref



2]

- Identifying effective networking and communication strategies within localities and across NHS GGC
- Development of resources and training for healthcare professionals.

The research involved further in-depth interviews with patients/carers (n= 27) to investigate their specific information needs on medicines to inform patient/carer information resources. Additional new resources were generated and deployed including: an education programme for pharmacy support staff; prescribing aids for GPs; and palliative care pharmaceutical care plan documentation.

Phase 3 - The capture of project activity over the 2 year evaluation enabled a detailed analysis of community pharmacy clinical practice and informed the construction of an evidence based model set within the current palliative care policy and practice frameworks for NHS Scotland. The model identified three key functions as important to the delivery of effective pharmaceutical palliative care services: the role of community pharmacy, interface/facilitator activities, and leadership and team co-ordination/administration, and mapped the key roles for each function to generate a capacity planning model, an area where there is currently no published work [ref 3].

Key Researchers

Marion Bennie, Professor of Pharmacy Practice University of Strathclyde (Oct 2009- to present) Steve Hudson, Professor of Pharmaceutical Care University of Strathclyde (Oct 2009-Nov 2010) Dr Gazala Akram, Lecturer in Pharmacy Practice University of Strathclyde (Oct 2009-to present)

- 3. References to the research (indicative maximum of six references)
- Akram G, Bennie M, McKellar S, Michels S, Hudson S and Trundle J. Effective Delivery of Pharmaceutical Palliative Care: Challenges in the Community Pharmacy Setting. *Journal of Palliative Medicine*, 2012, 15(3), 317-321; DOI: 10.1089/jpm.2011.0262
 Note on quality: This peer reviewed article presents the findings drawn from the community pharmacy data in Phase 1 of the project.
- 2. Bennie M, Dunlop-Corcoran E, Trundle J, Mackay C and Akram G. How community pharmacists could improve their role as providers of medicines information. *European Journal of Palliative Care*, 2013, 20 (4) 188-191.
 - **Note on quality:** This peer reviewed article presents the findings from the qualitative research from Phase 2 of the project
- 3. Bennie M, Akram G, Dunlop-Corcoran E et al. (2012). Macmillan Pharmacist Facilitator Project. (Final Report)

http://www.palliativecareggc.org.uk/uploads/file/news_reps/Macmillan%20Full%20Report%203 1012012%20FINAL.pdf

Note on quality: This end of grant report to Macmillan Cancer Support, summates Phase 1-3 of the report and presents the clinical practice model and capacity plan.

4. Details of the impact (indicative maximum 750 words) **Process/events from research to impact.**

In 2012, the research findings were used to shape a business proposal to deploy the new clinical pharmacy service model across NHS GGC. In early 2013, NHS GGC in collaboration with Macmillan Cancer Support agreed funding of £508,200 for the period 2013 - 2016.

Also in 2012, the research findings supported a successful bid by NHS Highland to Macmillan Cancer Support (£105,000, 2013-2016) to explore the service model within a remote and rural Health Board setting. Prof Bennie and Dr Akram, following competitive tender, secured £45,000 funding from Macmillan Cancer Support to conduct an evaluation of the project (2013 -2014).



Macmillan Cancer Support have disseminated the NHS GGC project findings across their UK network and have used the findings specifically to inform two aspects of their work: the UK Boots and Macmillan Partnership and the Macmillan Pharmacy Workforce Planning programme.

Types of impact

- Clinical pharmacy service model designed and delivered through influencing health policy and clinical practice
- New resources for patients and their carers
- New resources and staff development opportunities for the palliative care team

Influence on health policy and clinical practice

The evolved service model is aligned to the NHS Scotland policy frameworks in pharmacy and palliative care to maximise the complementary contributions of the multidisciplinary team and ensure community pharmacy teams play a central role in supporting the safe and effective use of medicines for patients and their carers [Source C]. The model is designed in a format that enables flexibility for the deployment of identified key functions through local business planning and service delivery frameworks:

- NHS GGC has initiated the roll-out of the service model to all 10 community health care partnerships (CHCPs) covering around 1.2 million population, to improve access to palliative care medicines and information provision from the 314 community pharmacies across NHS GGC (2013) [Source D and G]. Statement from Project Lead [Source D]: "The project findings have secured resource to expand the newly designed service across the NHS board and have been instrumental in developing the resources now used by GPs and Community Pharmacists to support the palliative care needs of patients and carers. In addition, the findings have been more widely shared across Scotland and the UK, for example, shaping the UK Boots and Macmillan partnership".
- In 2013, NHS Highland appointed a Macmillan Pharmacist Palliative Care Rural Practitioner to explore the applicability of the service model to a remote and rural community (13,000 island population) [Source E, H].
- The findings were presented to the Scottish Partnership for Palliative Care West Regional Group and the Scottish Palliative Care Pharmacists' Association to support dissemination (2012) [Source D].
- The findings were presented (2012) to the Macmillan Cancer Support Health Care
 Programme Management Group, disseminated across the UK network and are being used to
 inform specific work programs. For example, the capacity planning model is informing the
 pharmacy workforce development programme within Macmillan Cancer Support [Source D,
 E].
- The findings are showcased by the Royal Pharmaceutical Society (professional body for Pharmacy) as evidence of good pharmacy practice and innovation [Source I].

New resources for patients and carers

- Information leaflets that contained details of how to source medicines that are not routinely available are now provided to patients/carers. This has empowered patients to better assist health care professionals in accessing medicines and thus reducing delays in care provision (e.g. levomepromazine 6 mg tablets for severe nausea and vomiting an unlicensed formulation used in palliative care) [Source F].
- The findings have informed the development of the UK Boots and Macmillan Partnership which by mid-2013 has recruited over 1000 UK Boots Macmillan Information Pharmacists who have been provided with Macmillan resources (in part informed by our research) to better support patients and carers in the community [Source E].

New resources and staff development opportunities for palliative care team

 A single comprehensive Palliative Care Resource Folder was developed and distributed to all 314 NHS GGC community pharmacies in 2011 [Source A]. The folder was also made available through the Scottish Palliative Care Pharmacists Association to all NHS Scotland Health Boards. Through the Macmillan UK network, requests for the folder have also been



received from Lincolnshire (England) and Wales.

- A new face-to-face training programme was designed for pharmacy counter assistants and dispensing staff to support engagement with patients/carers and health care professionals to improve medicines supply and palliative care advice services. In 2011, a total of 98 staff participated in the program [Source D].
- A new e-learning resource on palliative care for pharmacy technicians was commissioned by NHS Education for Scotland (NES) and made available nationally from 2012 [Source B].
- An information leaflet (signposting community pharmacy services and advice available) was designed and distributed to all 314 community pharmacy, 260 General Practices and other primary care settings across NHS GGC (2012) [Source D].
- A Prescribing Aide for GPs to assist with appropriate and legal prescribing of end-of-life medicines was distributed to all 260 NHS GGC General Practices in 2011. This saw improvements in patient safety and a reduction in medicines wastage and staff time including; targeted messaging on the correct strength/formulation of midazolam injection saw an increase in appropriate and accurate prescribing rates from <50% to 72%, projected efficiency savings of ~£25,000, and efficiencies through "releasing nursing time to care" [Source D].
- 5. Sources to corroborate the impact (indicative maximum of 10 references)
- A. NHS GG &C Palliative Care Resource Folder for Community Pharmacy (2011) and Macmillan Pharmacist Facilitator Project Resource Toolkit

http://www.palliativecareggc.org.uk/uploads/file/guidelines/Macmillan%20Resource%20Toolkit%20 09022012%20FINAL.pdf

- B. NHS Education for Scotland website will support the case that a training resource was produced for pharmacy support staff and technicians and made available nationally (September 2012) http://www.nes.scot.nhs.uk/education-and-training/by-discipline/pharmacy/about-nes-pharmacy/educational-resources/resources-by-topic/palliative-care/palliative-care-for-pharmacy-technicians.aspx
- C. Living and Dying Well: Reflecting on Progress (2012) http://www.scotland.gov.uk/Resource/0039/00397689.doc this national overview report includes the NHS GGC project as an example of good practice "NHS Greater Glasgow & Clyde has run a project where Macmillan Pharmacist Facilitators have been established to help further develop community pharmacy capacity and improve service provision/co-ordination through the enhanced support of Community Pharmacy Palliative Care Networks."
- D Project Lead, Macmillan Pharmacist Facilitator Project, NHS Greater Glasgow and Clyde Health Board can be contacted to confirm the project findings led to a newly designed service across the NHS board; have been instrumental in developing the resources now used by GPs and Community Pharmacists to support the palliative care.
- E. Macmillan Cancer Support Development Manager can be contacted to endorse development of the UK Boots and Macmillan Partnership
- F. West Dunbartonshire Carers Group can be contacted to endorse new information resources for carers
- G. Deputy Lead Community Pharmacy Development can be contacted to endorse roll out across community pharmacies
- H. NHS Highland Project Lead, Macmillan Pharmacist Facilitator Project can be contacted to endorse that NHS Highland appointed a Macmillan Pharmacist Palliative Care Rural Practitioner
- I. Royal Pharmaceutical Society Map of Evidence database at http://www.rpharms.com/Map-of-Evidence/Map-of-Evidence.asp.