# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

# **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Involving the General Practitioner during Curative Cancer
	Treatment: a Systematic Review of Health Care Interventions.
AUTHORS	Perfors, letje; May, Anne; Boeijen, Josi; de Wit, Niek; van der
	Wall, Elsken; Helsper, Charles

# **VERSION 1 - REVIEW**

REVIEWER	Lesly Dossett
	University of Michigan USA
	Previous publication on the PCP-cancer specialist relationship.
REVIEW RETURNED	12-Sep-2018

GENERAL COMMENTS	This is a well-written systematic review exploring the effects of
	interventions targeting the incorporation of PCPs into the active
	treatment phase of cancer patients. This is an important topic and
	the Introduction appropriately motivates the study. The
	methodology is thorough and appropriate. The conclusions are
	supported by the results. My only comment is that while the
	authors have identified an important knowledge gap, I think they
	could go further in the Discussion to suggest what types of
	studies, interventions or outcomes should be explored and by
	whom (the PCPs or cancer specialists?). I would like to see further
	development of a framework or model that would guide future
	meaningful work - i.e. what outcomes are possible and which ones
	would actually motivate change (health care utilization, quality of
	life, overall survival, etc.)? I think this would strengthen what is
	already a very strong manuscript.

REVIEWER	Kristel van Asselt
	Amsterdam UMC, The Netherlands
REVIEW RETURNED	11-Oct-2018

OFNEDAL COMMENTS	Describe to recover sint file only in the Commed Describing and wine
GENERAL COMMENTS	Remarks to manuscript "Involving the General Practitioner during
	Curative Cancer
	Treatment: a Systematic Review of Health Care Interventions".
	The manuscript is written clearly, but need some clarification at
	several points.
	Background and study objective:
	The authors mention their interest in gate keeper health systems
	and give an example of the Netherlands. However, studies
	included are from UK, Australia, Denmark and Sweden. Maybe

they can explain why GP involvement is especially important in gate keeper systems.

The authors mention that there is room for improvement of GP involvement for reasons to encounter like side-effects of cancer treatment or psychosocial stress. However, the review is stressing the information transfer from hospital care to the GP and thereby indirectly increasing GP involvement. The number of consultations is one of the outcome measures.

In their background the authors should elaborate what they mean by "involving", the number of contact? Moreover, GP involvement can also include treatment of cancer, for example in skin cancer. GPs perform a lot of surgery of f.i. basalioma's. Also, GPs are involved in home-based chemotherapy or they take over hormonal therapy in prostate cancer patients by injecting patients every 3 months.

Also the authors do not explain why they are only interested in treatments with curative intent. Many cancers are treated with a palliative intent and can have very long duration with active treatment in the hospital.

#### Results:

Rehabilitation of the patient was central in one of the included studies. Since GP involvement in aftercare was not the aim of this review, this study should be excluded.

Although the authors have made a nice overview of the selected studies, they did not describe the usual care in the intervention. It is quite common that GPs are informed by the specialists that patients receive cancer treatment and information of side effect may be included already. Please provide the information of the usual care in the studies.

R246 Patient perception should be patient satisfaction Table 2. GP related outcome Drury: patients access to their records: is not relevant in this review

### Discussion:

Literature is scarce and the low uptake is explained by motivation of GP, evidenced by one article of Drury. There are a lot of observational studies (for instance systematic review of Dossett 2017) which could be used for explaining results.

The authors systemically reviewed GP interventions during cancer treatment. Complex interventions are difficult to review, selected studies are heterogeneous and process evaluation are important to take into account. Authors should acknowledge this.

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer: 1

Reviewer Name: Lesly Dossett

Institution and Country: University of Michigan USA

Please state any competing interests or state 'None declared': Previous publication on the PCPcancer specialist relationship.

Please leave your comments for the authors below

This is a well-written systematic review exploring the effects of interventions targeting the incorporation of PCPs into the active treatment phase of cancer patients. This is an important topic

and the Introduction appropriately motivates the study. The methodology is thorough and appropriate. The conclusions are supported by the results. My only comment is that while the authors have identified an important knowledge gap, I think they could go further in the Discussion to suggest what types of studies, interventions or outcomes should be explored and by whom (the PCPs or cancer specialists?). I would like to see further development of a framework or model that would guide future meaningful work - i.e. what outcomes are possible and which ones would actually motivate change (health care utilization, quality of life, overall survival, etc.)? I think this would strengthen what is already a very strong manuscript.

Answer: Following the valuable suggestions of the reviewer, we have made alterations to the discussion section and we have developed a framework to guide development of interventions aimed to effectively involve the GP in cancer care. In the discussion section and the framework, we have included suggestions for types of studies of studies which can support the development of feasible and effective interventions and which support choosing relevant outcomes (and therefore meaningful work).

Reviewer: 2

Reviewer Name: Kristel van Asselt

Institution and Country: Amsterdam UMC, The Netherlands

Please state any competing interests or state 'None declared': none declared

Please leave your comments for the authors below

Remarks to manuscript "Involving the General Practitioner during Curative Cancer

Treatment: a Systematic Review of Health Care Interventions".

The manuscript is written clearly, but need some clarification at several points.

Background and study objective:

The authors mention their interest in gate keeper health systems and give an example of the Netherlands. However, studies included are from UK, Australia, Denmark and Sweden. Maybe they can explain why GP involvement is especially important in gate keeper systems.

Answer: GP involvement might indeed be important in all kind of healthcare systems, however, in gate keeper systems GPs are generally the coordinators of care, who have a longstanding and personal relationship with their patients. This enables knowledge of both the medical and personal situation of the patient, and care which is provided in a trusted environment with a familiar health care worker. Since health care coordination and personal guidance remain relevant during and after treatment, and are dependent on continuity of (primary) care, involving the GP during treatment in gatekeeper systems is of additional importance. We have added an explanation in the Background section (line no. 91-94)

The authors mention that there is room for improvement of GP involvement for reasons to encounter like side-effects of cancer treatment or psychosocial stress. However, the review is stressing the information transfer from hospital care to the GP and thereby indirectly increasing GP involvement. The number of consultations is one of the outcome measures.

Answer: We indeed stress the importance of information transfer. As mentioned, continuous GP involvement is considered of substantial added value. Since the GP needs to be informed to provide

adequate care, and since the treating physician can provide more complete care using the GPs personal knowledge, information transfer between these health care workers seems key.

In their background the authors should elaborate what they mean by "involving", the number of contact? Moreover, GP involvement can also include treatment of cancer, for example in skin cancer. GPs perform a lot of surgery of f.i. basalioma's. Also, GPs are involved in home-based chemotherapy or they take over hormonal therapy in prostate cancer patients by injecting patients every 3 months.

Answer: The used definition of GP involvement is "oncology related care for the patient starting from oncology treatment." "Care" in this definition, refers to supportive care (e.g. psychosocial support) and not to providing part of the medical tumor directed treatment. This definition is explained in line no. 111-114.

Also the authors do not explain why they are only interested in treatments with curative intent. Many cancers are treated with a palliative intent and can have very long duration with active treatment in the hospital.

Answer: We agree that the role of the GP is also important during palliative cancer treatment. We also believe that the role of the GP during the curative setting differs from the palliative setting. Since the GPs role and involvement during curative and palliative treatment differs, we considered writing a review describing only one of the two (curative / palliative) was more feasible. Since more is already known about the palliative setting, we focused on the involvement of the GP during curative treatment.

#### Results:

Rehabilitation of the patient was central in one of the included studies. Since GP involvement in aftercare was not the aim of this review, this study should be excluded.

Answer: We agree that studies addressing rehabilitation in aftercare should not be included.

However, in Bergholdt et al 2012, rehabilitation is defined as care during treatment (they use the WHO definition of Rehabilitation "a process intended to enable people with disabilities to reach and maintain optimal physical, sensory, intellectual, psychological and/or social function"). Since this definition and the timing of GP guidance (during treatment) fit our definition of involvement, we included the study.

Although the authors have made a nice overview of the selected studies, they did not describe the usual care in the intervention. It is quite common that GPs are informed by the specialists that patients receive cancer treatment and information of side effect may be included already.

Please provide the information of the usual care in the studies.

Answer: We agree that usual care does quite regularly include GP involvement and that usual care should be described. We have included information concerning usual care in our manuscript. (Line no. 204-211)

R246 Patient perception should be patient satisfaction

Answer: Since the paragraph included several types of perceptions (e.g. perceived support), including satisfaction, we have deliberately chosen the word perception in this passage.

Table 2. GP related outcome Drury: patients access to their records; is not relevant in this review Answer: We have removed this outcome from table 2.

### Discussion:

Literature is scarce and the low uptake is explained by motivation of GP, evidenced by one article of Drury. There are a lot of observational studies (for instance systematic review of Dossett 2017) which could be used for explaining results.

Answer: We incorporated the results of the review of Dossett et al. (2017) in the discussion section (line no. 334-342).

The authors systemically reviewed GP interventions during cancer treatment. Complex interventions are difficult to review, selected studies are heterogeneous and process evaluation are important to take into account. Authors should acknowledge this.

Answer: We have made alterations accordingly in the discussion section. (Line no. 356-359) Due to comments from reviewer one we added a framework to guide future research for complex interventions.

## **VERSION 2 - REVIEW**

REVIEWER	Lesly Dossett
	University of Michigan
	Prior publication on the PCP-cancer specialist relationship
REVIEW RETURNED	07-Dec-2018

GENERAL COMMENTS	The authors have addressed my concerns in the revision.
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REVIEWER	KM van Asselt
	Amsterdam UMC location AMC The Netherlands
REVIEW RETURNED	28-Dec-2018

GENERAL COMMENTS	The review is improved and the questions are well answered.
	The aim of the study remains somewhat unclear. In the introduction shared care is explained, and at other places GP involvement is chosen as the outcome. These terms are alternately used. Interventions are included aiming better information transfer and also interventions aiming at improved GP care and patient support. The introduction could use a bit more clarification about the different outcomes and search terms.
	Another concern is about the development of the framework. It is a nice overview of the different phases, however no pilots of interventions were included in the review and the term "development" of a framework is somewhat out of proportion. It is a proposal of a framework and it underlines the disapointing contribution of the review due to different reasons and outcomes of the studies.

### **VERSION 2 – AUTHOR RESPONSE**

Reviewer: 1- Lesly Dossett

Please leave your comments for the authors below:

"The authors have addressed my concerns in the revision."

Reviewer: 2 - Kristel M van Asselt

"Please leave your comments for the authors below:

Reviewer: The review is improved and the questions are well answered.

The aim of the study remains somewhat unclear. In the introduction shared care is explained, and at other places GP involvement is chosen as the outcome. These terms are alternately used. Interventions are included aiming better information transfer and also interventions aiming at improved GP care and patient support. The introduction could use a bit more clarification about the different outcomes and search terms."

Authors: The terms "shared care" and "GP involvement" are indeed not equal. We elucidated this in the introduction section (line 97-98 & 103-105, page 7).

Clarification to the reviewer: We introduce the concept of "shared care" since literature, health care organizations and health care workers advocate increased shared care as a main objective for future cancer care. To realize increased shared care, increased involvement of the GP is by definition essential. The aim of the review is therefore to get an overview of "the content and effect of interventions aiming at active involvement of the general practitioner during cancer treatment".

Reviewer: Another concern is about the development of the framework. It is a nice overview of the different phases, however no pilots of interventions were included in the review and the term "development" of a framework is somewhat out of proportion. It is a proposal of a framework and it underlines the disapointing contribution of the review due to different reasons and outcomes of the studies.

Authors: We agree with the proposed rephrasing. We also made small alterations in the text in accordance with this new terminology. The discussion section now states (line 370, page 24) "Based on the findings in this review and guidelines for developing and evaluating complex interventions [28] and feasibility studies [29], we propose a framework....." and (line 374, page 24) "This framework should support us in finding definitive answers on the effects of GP involvement in the cancer care pathway in different health care settings"

Minor comment from authors: We noticed that the legends for the tables 1 (line 298, page 16) and table 2 (line 303, page 21) could be considered incomplete. We extended these to make them more clear.