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# Pragmatic Innovations in Post-Acute and Long-Term Care Medicine

Feasible new, practical products or approaches intended to improve outcomes or processes in post-acute or long-term care

## Improving Cancer Treatment Communication between Secondary and Primary Care: A New Format for Written Communication



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### ABSTRACT

In decision making for cancer treatment, information is crucial for patients and health care professionals. Although conversations about treatment decisions take place in hospitals, many patients also appreciate the insights of their general practitioner (GP). GPs indicated that, in order to have meaningful conversations about treatment decisions with their patients, they need additional information about treatment options and considerations, such as expected benefits and side effects.

In this practice innovation, we developed and implemented a new written communication format from medical specialists to GPs, aimed at providing accurate treatment information to facilitate GPs in supporting patients with cancer in decision-making. The new format added 3 specific headings to standard letters in the electronic patient files (EPFs): (1) treatment options, (2) treatment considerations, and (3) treatment intent.

This innovation was implemented in a large university hospital in the Netherlands between 2020 and 2021. We performed a process evaluation of the implementation using the RE-AIM model, based on assessment of written communication obtained from patients' EPFs, and telephonic interviews with specialists and GPs.

In the Netherlands, all inhabitants are registered with a GP, who acts as a gatekeeper to specialist care, and has a comprehensive overview of a patient's history, based on digital communication with hospitals after referral for specialist care. EPFs are used to generate digital letters to communicate between medical specialists in a hospital and GPs outside the hospital. Incorporating new headings in the communication format in the EPF successfully encouraged medical specialists to share such information when used appropriately. Treatment options, considerations, and treatment intent were stated more often in the new format compared with the old format. GPs appreciated the new format, highlighting the value of including treatment considerations, which enhanced their comprehension of the medical specialist's thought processes.

Recognition of the problem and motivation for improvement facilitated the implementation. Specialists stated the format to be time-efficient compared with the old format; however, technical improvements could make it easier to use. Automaticity to use of the old format, inadequate information, and technical issues were a barrier for implementation.

In summary, a straightforward innovation can improve communication between medical specialists and GPs and promote the role of the GPs in decision making for cancer treatment.

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**Keywords:** Communication, primary care, shared decision-making, oncology, implementation

### Problem/Significance

Patients confronted with a cancer diagnosis must make multiple decisions about their treatment, informed by their individual contexts and preferences.<sup>1,2</sup> Although conversations about treatment decisions

take place in hospitals involving the patient, their family, and the medical specialist, many patients also appreciate the insights of their general practitioner (GP).<sup>3</sup> GPs, often familiar with patients over an extended period, may possess valuable knowledge of relevant contexts,<sup>4</sup> and see it as part of their role to support individuals in this decision-making process.<sup>5</sup> In a national survey among patients with cancer, two-thirds expressed a strong desire for their GP's involvement in discussing life priorities and the consequences of various treatment options.<sup>4,6</sup> However, only 15% reported such engagement, potentially indicating a gap.<sup>6</sup> This disparity may arise from insufficient information provided by medical specialists to discuss treatment options and consequences. Previous analysis of hospital communications to GPs underscored the necessity for improved communication between primary and secondary care.<sup>7</sup> These findings revealed a lack of

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Dear Colleague,

I hereby send you the details of Mr. XX XXXX, born XX-XX-XXXX, UMCG no. XXX, BSN XXXX seen on XX-XX-XXXX in the Gastrointestinal Oncological Center North Netherlands (GIO NN) for Oncological surgery.

**Reason of visit**

**Past medical history**

**List of active medication**

**Allergies**

**Presenting symptoms**

**Physical examination**

**Investigations**

**Conclusion**

**Conclusion multidisciplinary team (MDT)**

**Treatment options**

- As suggested in MDT
- Alternative treatment/other treatment options
  - Do nothing / No disease-oriented treatment / palliative treatment
  - No surgery
  - In a study context
  - Different
- Options discussed with patient

**Considerations**

Relevant information about vulnerability/context patient

**Treatment/policy:**

**Treatment intention**

Curative/ palliative intent

**Discussed with patient**

**Comment or request for GP**

**Comment or request for other healthcare professional**

For any questions, additions, or feedback, please contact our case managers ... XX, XX

Yours sincerely,  
XX

**Fig. 1.** Format of the new letter.

detailed information on treatment options, considerations, treatment intent (curative or palliative), and alternative options.<sup>7</sup> GPs indicated that in order to have meaningful conversations about treatment decisions with their patients, they need additional information about treatment options, such as expected benefits, side effects, and considerations.<sup>8</sup>

In this practice innovation, we developed and implemented a new format for written communication from medical specialists to GPs, aimed at providing accurate treatment information and improving the current communication between medical specialists and GPs. As GPs and medical specialists do not share the same EPF, communication by

means of digital letters is crucial. Our goal was to provide GPs with comprehensive information to facilitate them in supporting patients with cancer in decision-making.

#### *Innovation*

We developed the communication format in a participatory approach with relevant stakeholders addressing and solving issues that could prevent successful implementation as they arose. A detailed description of this approach is included in [Supplementary Figure 1](#).

**Table 1**  
Content of Letters Following the New Format

|   | Old Format<br>(n = 23) n (%) | New Format<br>(n = 15) n (%) |
|---|------------------------------|------------------------------|
| Adherence to the new format                   |                              |                              |
| Gastric/Esophageal                            | 18                           | 13                           |
| HIPEC procedure                               | 3                            | 1                            |
| Colorectal cancer                             | 2                            | 1                            |
| Adherence to the intervention                 |                              |                              |
| Is a letter sent to the GP?                   | 22 (96)                      |                              |
| Are all headings of the letter filled?        | n.a.                         | 15 (100)                     |
| Is the treatment intent stated in the letter? | 7 (30)                       | 13 (87)                      |
| Are treatment options stated in the letter?   | 6 (26)                       | 13 (87)                      |

n.a., not applicable.

The first draft of the innovation was based on relevant literature and expertise in the project team.<sup>7,8</sup> This version was discussed in 4 focus groups comprising medical specialists, nurses, GPs, or patients, and an advisory board consisting of various health care professionals and patients. Based on their feedback, we adjusted the draft intervention. Ultimately, based on close collaboration with the hospital departments that implemented the innovation, final adaptations were made to accommodate existing working routines. The new format for written communication added 3 specific headings to standard letters in the EPF: (1) treatment options: this included guideline recommendations, palliative options, and best supportive care; (2) treatment considerations: pros and cons, including information about patient vulnerability and context; and (3) treatment intent: curative or palliative. [Figure 1](#) provides an example of the format, with new headings highlighted in yellow.

### Implementation

The intervention was implemented between November 2020 and February 2021 in the University Medical Center Groningen (UMCG). This is a large academic center in the northern parts of the Netherlands that serves as a tertiary referral center for complex care and delivers more than 300,000 outpatient clinic visits a year. We started this implementation in the department of surgery. Participating specialists agreed to use the new format with every new patient attending the surgical outpatient clinic. Following an iterative approach of implementation, we initially focused on patients referred for gastric and esophageal cancer. With the feedback and adjustments of the participating specialists, we extended the implementation to include patients with colorectal cancer and those eligible for cytoreduction and hyperthermic intraperitoneal chemotherapy (HIPEC). The participating medical specialists were informed about the meaning of the new headings and which information could be provided under the additional headings. Furthermore, explanations were given to the participants about where they could find the new format in the EPF; however, old formats were kept available, so medical specialists were provided a choice. Because of the COVID-19 pandemic-related restrictions, communication with the specialists was done by email or telephone.

### Evaluation

We evaluated the intervention using the RE-AIM framework, which measures 5 interacting dimensions: Reach, Effectiveness, Adoption, Implementation, and Maintenance. We evaluated the use and the content of the new format for written communication based on both quantitative measures and interviews among medical specialists and GPs. For the evaluation we identified all new patients of the participating specialties who were eligible for inclusion and obtained informed consent for the evaluation. A detailed overview of evaluation measures and included patients is provided respectively in

[Supplementary Table 1](#) and [Supplementary Figure 2](#). Data for 38 patients (16 women; 42%) were analyzed with a median age of 67 years (interquartile range, 61–74 years). Most participants had gastric or esophageal cancer (n = 31; 82%) and underwent treatment with curative intent ([Supplementary Table 2](#)). Medical specialists used the new format for 15 of 38 patients (39%) in the implementation period ([Table 1](#)). Treatment options and considerations about the treatment were mentioned in 80% of the letters in the new format, compared with 26% of the letters in the old format. In addition, treatment intention was mentioned in 87% and 30% of the new and old format letters, respectively ([Table 1](#)).

Specialists stated in interviews that the new format was equally time efficient as previous ones, serving as a reminder to mention alternative treatment options and provide reasoning for their recommendations. The main disadvantage was related to information and communication technology, difficulty was experienced when importing information directly from the EPF (eg, blood test results), which they sometimes needed to include to explain their considerations. They also mentioned the headings could feel like a checklist and that they should stimulate the discussion about treatment options. Responding medical specialists expressed their intent to continue using the new format for improved communication, noting its effectiveness. They suggested that technical enhancements to the EPF, like a shortcut or simplified upload of supporting information, could further enhance usability.

None of the interviewed GPs had explicitly noticed differences between the new and the old communication formats themselves, but most were positive about the letters they received during the implementation period. They appreciated the new format, noting the well-designed layout. Specifically, they highlighted the value of including treatment options considerations, which enhanced their comprehension of the medical specialist's thought processes.

Q1: "This was a particularly clear letter with sufficient information about the effect of treatment that was foreseen. You can follow approximately what has been discussed and what the thoughts and preferences of the specialist were."

### Comment

All participating medical specialists and GPs acknowledged the problem of inadequate communication about treatment decisions and endorsed the new communication format, expressing motivation to improve patient care collectively. However, barriers to adoption also existed, such as the automaticity of using established methods, limited time to learn new methods, and technical issues such as difficulty importing information directly from the EPF.<sup>9</sup> Some specialists faced challenges, such as insufficient information due to staff changes, difficulty locating the new template, forgetfulness, or technical issues, exacerbated by the continued availability of old formats in the EPF.

Because of COVID-19 and related restrictions, planned strategies involving direct contact with medical specialists were prohibited, and nonessential care improvement activities were suspended. This limited time and support for the intervention, resulting in specialists having less time to adapt to the new format. In spite of the brief implementation period, we collected valuable insights into the real-world implementation process. These lessons can inform the implementation of similar interventions in other hospitals. Researchers should not assume automatic adoption of interventions or new techniques; understanding the barriers and facilitators to implementation is crucial. Regular reminders and support during daily use can enhance implementation.

Several studies focused on enhancing written communication among healthcare professionals for advanced care planning.<sup>10</sup> Yet, none, to our knowledge, targeted improving shared decision-making

for treatment by explicitly mentioning various treatment options and intentions in written correspondence. In this innovation, incorporating new headings in the communication format in the EPF, successfully encouraged medical specialists to share such information when used appropriately. As communication from medical specialists to general practitioners most often happens by means of a digital letter, this type of innovation can be used in every hospital, regardless of their specific EPF.

GPs appreciated information about treatment options and underlying considerations as this made it easier to have meaningful discussions with their patients. This is consistent with previous research showing that GPs experienced the lack of such information as a barrier,<sup>7,8</sup> and adds preliminary evidence that a targeted intervention in the communication template from specialists could remedy this problem.

In summary, this intervention can improve communication on cancer treatment decisions between primary and secondary care, facilitating active engagement of GPs and aligning with the goal of personalized healthcare.

### Disclosures

The authors declare no conflicts of interest.

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### Supplementary Material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jamda.2024.105234>.

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The pragmatic innovation described in this article may need to be modified for use by others; in addition, strong evidence does not yet exist regarding efficacy or effectiveness. Therefore, successful implementation and outcomes cannot be assured. When necessary, administrative and legal review conducted with due diligence may be appropriate before implementing a pragmatic innovation.