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Cross-sectoral communication by bringing together cancer patient, general practitioner and oncologist in a video-based consultation. A qualitative study of oncologists' and nurse specialists' perspectives

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ABSTRACT

Shared care models in the field of cancer aim to improve care coordination, role clarification, and patient satisfaction. Cross-sectoral communication is pivotal. Involvement of patients may add to intended mechanisms.

A randomised controlled trial 'The Partnership Study' tested the effect of bringing together patient, general practitioner (GP) and oncologist for a consultation conducted by video.

Purpose

As part of the process evaluation, this study aimed to explore experiences, attitudes, and perspectives of the oncologic department on sharing patient consultations with GPs using video.

Methods

Four semi-structured interviews with five oncologists and four nurse specialists were conducted in February 2020. We focused on the informants' experiences and reflections on the potential of future implementation of the concept 'inviting the GP for a shared consultation by video'. The analyses were based on an inductive, open-minded, hermeneutic phenomenological approach.

Results

A total of six overall themes were identified: structuring consultation and communication, perceptions of GP involvement in cancer care, stressors, making a difference, alternative ways of cross-sector communication, and needs for redesigning the model. The concept made sense and was deemed useful but solving the many technical and organisational problems are pivotal. Case-specific tasks and relational issues were targeted by pragmatically rethinking protocol expectations and the usual way of communication and structuring patient encounters. Case-selection was discussed as one way of maturing the concept.

Conclusion

This Danish study adds new insight into understanding different aspects of the process, causal mechanisms as well as the potential of future implementation of video-based tripartite encounters. Beyond solving the technical problems, case-selection and organisational issues are important. Acknowledging the disruption of the usual workflow, the introduction of new phases of the usual encounter, and the variety of patient-GP relationships to be embraced may help to better understand and comply with barriers and facilitators of communication and sharing.

Key words

Cross-sector communication, cancer, oncology, primary care, video consultation, professional relationship, shared care, patient involvement, qualitative research

STRENGTHS AND LIMITATIONS OF THE STUDY

- This study adds to the process evaluation of a RCT
- In light of the COVID-19 pandemic, study results are more actual than ever
- Results may apply to other areas of shared care
- The perspectives of the oncologic team are explored, however not patients' or GP's perspectives
- Aspects and viewpoints may have been overlooked

KEY POINTS

- The role of the GP during cancer treatment is often unclear to patients and health professionals. Cross-sectorial communication rarely actively include the cancer patient.
- An innovative way of cross-sector communication during chemotherapy took outset in an invitation of the GP to take part in a patient consultation by video
- From the oncological perspective, the concept was deemed useful.
- The variety of relationships between patients and general practitioners needs acknowledge.
- Organisational, case-related, and relational stressors in addition to the many technical challenges gave rise to suggestions of case-selection and logistical refinements

BACKGROUND

Continuity of care is a huge challenge for all health care systems as well as for many patients with chronic disorders like cancer(1). In periods with intensive treatment in hospital, it is often unclear to patients who will take care of their comorbidities and psychosocial aspects of living with a life-threatening disorder(2). The integration of general practitioners (GPs) into survivorship care is needed and underpinned internationally. However, GPs may feel uncomfortable with cancer-related issues, insufficiently informed by specialists, and left with an unclearly defined role (3, 4).

Various shared care models have been developed in the field of cancer, primarily involving the GP and specialist in a formal explicit manner (5-7). Communication between them through the exchange of information and arranging responsibility to improve the follow-up management has been in focus (6). Formal communication channels have been defined by discharge letters, cancer care plans, electronic platforms for text messaging, or phone calls from nurse specialists (8-10). Reviews have concluded that these different models enable GPs' involvement in survivorship care and help the cooperation between the hospital and primary care (6, 7, 10, 11). However, patients themselves have only been scarcely involved and no significant improvement in quality of life has been observed.

During the last decade, there has been increasing attention to patient involvement and shared decision-making in clinical oncology. Studies have stressed the importance of patient-centered communication, preparing patients for self-manage, and knowing who is going to help with what aspects of future treatment (12, 13). Having patient-centeredness as a key-value of health care, we developed a shared care model based on a formal way of cross-sector communication giving room for engagement of the patient (14). Being aware of geographical constraints, but appreciating the living dialogue and seeing each other, we designed an intervention bringing cancer patient, GP and oncologist together in a virtual room using video (15, 16). Oncologists invite GPs to participate in usual patient encounters, bring in their knowledge, and take on responsibility and specific tasks during treatment and survivorship.

As outlined in the Medical Research Council Guidelines for complex interventions, process evaluation is an important part of trial evaluation (17). To fully understand trial mechanisms, acceptability, user perspectives, and clues to future implementation strategies, tailored research should capture what was delivered and understand complex pathways (18).

AIMS

As part of the process evaluation of the Partnership intervention, this study aimed to explore experiences, attitudes, and perspectives of doctors and nurses working in clinical oncology on sharing patient consultations with general practitioners using video.

MATERIAL AND METHODS

This qualitative work is part of the process evaluation of the randomized controlled trial (RCT) 'The Partnership Study', which evaluates video consultations shared by the patient with cancer, the oncologist, and the GP. The empiric data was sampled by interviewing oncologists and specialist nurses who have conducted this type of consultations.

The Partnership Study

The design of the RCT has been described in detail elsewhere (15). To put it briefly, GPs of the 140 adult cancer patients allocated to the intervention arm were invited by the oncological department, Vejle Hospital, for one of the consultations during treatment with chemotherapy. The patients could choose to sit by the oncologist or by the GP as one fifth did.

The overall aim of the trial was to assess the impact of the shared consultation on patient-perceived inter-sectoral cooperation and continuity of care, cancer-related distress, and health-related quality of life. Based on a patient-centered approach, sharing a consultation with the two professionals should help to clarify the roles and tasks of the GP and oncologist, respectively, thereby improving patient comfortability with future treatment. At the same time, professionals could share relevant knowledge. Before each consultation, the oncologist and GP were handed a short consultation guide informing about consultation structure, aim, and potential themes (Box 1).

INSERT BOX 1 HERE

Box 1 Consultation guide including a list of potential themes presented for the general practitioners and oncologists before the Partnership consultation.

Consultation structure, aim, and content

- The oncologist acts as chair of the shared video consultation
- The duration of the consultation should be 10-20 minutes
- The oncologist started by introducing the participants and the purpose of the shared consultation:
  - Exchange of information between all participants for the benefit of the patient
  - Role and tasks clarification between the Oncology Department and the general practitioner
- The consultations conclude with a summary where it is clarified whether a follow-up is needed at the general practitioner or Oncology Department
- The consultation and its agreements are documented in the hospital electronic patient record, sent to the general practitioner and done available for the patient

Potential themes for the consultation:

- A summary of the patient trajectory
- Patient concerns and desire for the consultation
- Sharing knowledge regarding comorbidity
- Psychosocial resources and needs

- Agreements on who should take care of what and when in the future
- Physical wellbeing
- Medicine
- Psychological wellbeing
- Relatives
- Ability to work
- Late complications and side effects of the treatment
- Other

Due to 21 GPs' declination to participate, patient death, and cancer severity, 79 consultations were conducted by 14 doctors (12 oncology specialists and two trainees). According to department routines, they were assisted by a nurse specialist. An unknown number of nurse specialists were involved in patient enrolment and the consultations.
As usual, patients were incited to bring along relatives.

Participant recruitment
Local key informants from the department were invited by LHJ (doctors) and a team-leading nurse specialist (nurses). Informants were selected purposively to be representative regarding gender and the disease-specific oncological teams.

Data sampling
Shortly after the last Partnership Intervention had taken place DGH conducted four semi-structured focus group interviews with five oncologists and four specialist nurses at Vejle Hospital. It was in February 2020, just before the COVID-19 pandemic reached Denmark. DGH introduced herself as MD with a long research career within family medicine and cancer, principal supervisor for PhD student TBT and deeply involved in the project. Coffee and small talk were shared to establish a comfortable environment. The participants were encouraged to speak freely and honestly. The conversation was based on the predetermined open-ended questions of the interview guide and other issues emerging from the dialogue (19) (Appendix 1). Trained in focus group interviewing, DGH simultaneously observed the interaction dynamics within the groups (20). Due to practical reasons and considerations about the hierarchical nature of participants, oncologists and nurse specialists were grouped separately (19, 21). None besides interviewer and informants were present.

As planned, the interviews took 45-55 minutes. No repeat interviews were carried out. The preliminary data analysis coincided with data collection.

The interviews were audiotaped and transcribed verbatim by a trained research assistant (22). Transcripts were not returned to informants for comments.

Further on researcher characteristics and reflexivity
All authors have been involved in all phases of the RCT (15, 23, 24). TBT took lead on most practical and technical issues related to the intervention. He and chief specialist LHJ promoted the trial at the department. The professors JS and JJS have a long clinical career in family medicine and

cancer research. During the analytical phase, we repeatedly reflected on trial ownership and medical specialty as potential sources of bias. DGH and JS defined the interview guide.

The process of analyzing and reporting

The analyses were based on an inductive, hermeneutic phenomenologic approach (22, 25). After each interview, DGH familiarised with data by listening reflectively to the audio recordings and making interpretive notes. Themes, patterns, and codes emerged. She continued with a careful reading of the transcripts, iteratively defining and organizing codes into meaning bearing entities. This data managing was supported by the software NVivo12. Based on manuscript drafts, themes, codes, and meanings were discussed orally and by e-mail with co-authors resulting in minor reorganization and rephrasing. Subsequently, the number of quotations was reduced to one third. Half-finished sentences and irrelevant wording were removed and replaced by "[…]". Finally, DGH checked the grounding of the results in the empirical material (20).

In the double role of co-author and informant, LHJ did the member checking. All co-authors were involved in study designing and gave critical comments to manuscripts.

The reporting of the study follows the SRQR Standards for Reporting Qualitative Research (26) and includes the COREQ checklist (Appendix 2).

RESULTS

The length of the interviews was regarded as adequate. A relaxed atmosphere and good group dynamic were reached giving room for synergistic thoughts and exchange of views.

Thoughts pop up in your mind when you start talking about it. Lots of ideas (Specialist nurse)

In most cases, the informants referred to cases with the patient placed at the oncologic department. During the analysis, 15 categories and six overall themes emerged (Table 1).

[INSERT Table 1]

Table 1. Overall themes and categories defined by the analysis of focus group interview with oncologists and nurse specialist experienced with the Partnership intervention bringing together patient, GP and oncologist for a consultation shared by video

Overall themes	**Categories**
Structuring consultation and communication	Tailoring to individual tasks
	Rethinking the usual encounter
Perceptions of GP involvement in cancer care	The patient-GP relationship
	GP behavior
	Premises for the consultation
Stressors	Technical stressors
	Organisational stressors
	Case-related stressors
Making a difference	At group level
	At the individual level
Alternative ways of cross-sector communication	Workshops
	Phone calls
	Discharge letters
Needs for redesigning the model	Urgent Prerequisites
	Wanted changes

GP: general practitioner

Theme 1: Structuring the consultation and communication

Tailoring to individual tasks

The oncologists remembered the consultation guide. However, they had quickly 'found their own way' of conducting these consultations and pragmatically tailored protocol expectations to organizational issues and specific tasks. Some oncologists preferred to explain topics as CT scans to patients without having the GP onboard. Private pre- and post- discussions with the patient were thereby introduced:

In case there was a scan result I discussed it with them [patient and relatives] before, so they were not - so to speak - not taken hostage in the conversation, […] and then after a short time I call the GP; and then finish afterward, conclude with a summary and by asking if there is anything I should know when their GP is not there (Oncologist)

Rethinking the usual encounter

From the department perspective, a Partnership consultation with the patient placed at the department was framed with three up to five phases: The oncologist 1) had a short dialogue with the specialist nurse, 2) included patient and relative, 3) continued with the shared part of the consultation having the GP onboard, 4) finished having some extra time with patient and relative, and 5) left the room leaving the patient and relative together with the specialist nurse. In case the patient was sitting by the GP, only phase 1 and 3 came into play, eventually finished with a short dialogue between oncologist and nurse specialist.

All informants agreed that the oncologist had been the leader of the consultation and the patient was in focus. To a varying degree, the GPs 'took their time', often in the second half of the consultation. Also remembered were situations where the GP partly took over:

He [the GP] talked a lot with the patient. I was side-lined, but, but I don't think it mattered (Oncologist)

Regarding communication, additional efforts were put into addressing the different interests, expectations, and premises that patients and GPs represented:

[…] in a situation like this you make much of an effort to be - even more - pedagogical, for both the patient and the GP (Oncologist)

Theme 2: Perceptions of GP involvement in cancer care

The patient-GP relationship

A variety of patient-GP relationships were to be embraced. Some patients had clearly explained their relational situation beforehand. Others did it during study enrolment or the introductory phase of the consultation. In addition to well established professional relations, the informants explained about patients that had not been in contact with their GP during the cancer treatment or even since long before diagnosis:

If you don't have a good relation with your doctor, if you don't know … or haven't visited much […]. In some way, it is a stranger sitting by (Specialist nurse)

Some patients distrusted their GP due to a diagnostic phase that in their opinion had been too long or included misunderstandings. The oncologists thought those patients had denied participating, or their GP had. However, the specialist nurses told them they had thoroughly recommended them to participate and were impressed by their courage to participate. They were much aware of challenges and tensions in these consultations.

GP behavior

It was discussed how differently GPs behave and their role is thought of by patients. Some GPs saw the patient regularly. Other GPs had given the patient the impression of being unwilling 'to take part' and 'take on responsibility' during the oncological treatment - for example of pain and treatment-related hypertension.

What does it mean when the patient says, 'my GP is not willing to help me with this'? In fact, I don't think it is true (Oncologist)

Premises for the consultation

Thus, from time to time complex aspects of the patient-GP relationship were premises for the consultations. Although not always understanding the relational tensions and what was meant by the GPs, attention was paid to barriers and facilitators to the communication.

Theme 3: Stressors

All informants were concerned about the stress by the inclusion of video and the GP as a third party.

Technical Stressors

Technical issues related to the video connection were time-consuming, frustrating, affecting their professionalism, and sometimes unsolvable.

> […] consultations went wrong. You know, we failed to get in contact at all. I also had some …we ended up calling by phone and talked without video […] so frustrating […] you get behind schedule ... knowing that somebody is at the other end, waiting, and wasting time, and the patient is just sitting, looking. It is incredibly unprofessional *(Oncologist)*

Organisational stressors

The informants all recognised tight ambulatory schedules and being routinely behind time. A Partnership consultation was a clinical obligation, time-fixed like multidisciplinary team (MDT) conferences or encounters using external interpreting services. However, knowing that *an external colleague* was expecting them at a specific time was perceived as extraordinarily stressful.

The informants were used to encounters partly defined by protocols. Integrating too many things and concepts into one encounter could be critical and set participants under pressure. However, beyond the critical technical issues, the extra topics of a Partnership Intervention were acceptable, and the typical length of 12-14 minutes referred to as appropriate.

Both internal and external organisational stressors had the potential of compromising the conceptual idea of the Partnership consultation. The GP and his or her level of calmness, engagement, or irritation, was mentioned. However, using a lot of effort, they most often succeeded to overcome starting problems.

Case-related stressors

Case-related stressing factors included situations where the oncologist experienced no apparent need for having the GP onboard: low-complex cases like otherwise healthy females with breast cancer, and patients already well supported by the GP. These situations were by some informants perceived a wrong prioritisation of their professional time.

> *In case the patient has no problems, the aim of the consultation becomes somewhat forced (oncologist)*

Especially if a difficult message had to be communicated, it called for extra attention when having a third part in the room:

In case you are focusing on the patient when breaking bad news, it is difficult to keep an eye on the GP, too (Oncologist)

Theme 4: Making a Difference

The Partnership Interventions were deemed useful in several ways regarding individual trajectories. Furthermore, at a group level, they had the potential to make a difference for future patients. Getting more insight into GPs' competences and areas of concerns by meeting them in action changed habits and professional persuasions:

I have become aware of […] how much they [the GPs] engage, counsel, and support. I have seen some very skilled and very empathic GPs […]. Previously, I could not advise the patients about that. I quickly said 'let us ask the palliative team'. (Specialist nurse)

Previously, when I said 'try consulting your GP', I felt as if I pushed it out of my mind, but now… I say so because.. it will work out better […]. It is not a bad solution, or because I am lazy (Oncologist)

Several examples were given regarding how a Partnership consultation was perceived as useful to the patient. Being together paved the way for overcoming mistrust. Allowing the GP to empathetically welcome the patient and relatives for psychosocial and palliative care and underline their role and comfortability treating comorbidities, cancer pain, etc were other examples. However, to what degree the Partnership consultation had been pivotal to the informants was more unclear. In many cases, relationships were long-established and things organized beforehand.

A few extraordinary examples were remembered like one with a drug-addicted patient. According to the oncologist, sharing that dialogue about future prescribing of pain killers was so meaningful and had never happened without this project.

Completing a long-lasting trajectory was easier for both patient and oncologist when convinced about the GP's role, readiness, and competences. Partnership consultations thus provided a measure of relief to the oncologist.

Except for one oncologist, the informants agreed: having the GP onboard a patient consultation using video was worth implementing in routine clinical practice – in a structured way.

A scheduled appointment. I know that the doctor at the other end has time and that I have time. You see, that is perfect. I think we talk way too little with the GPs. Way too little (Oncologist)

Clues to implementation

Before discussing the need for redesigning the concept, the oncologists challenged alternative models of communication and partnering with GPs. However, all compromised the conceptual idea of patient-centeredness.

Theme 5: Alternative ways of cross-sectoral communication

Workshops for GPs were mentioned as one way of partnering at a general level. Calling the GP by phone was discussed as a more flexible way of professional sharing regarding individual patients. Relating to the perceived relevance of what was talked about during Partnership consultations, an oncologist criticised their discharge summaries to GPs. Laughing, the group agreed to them being useless alternatives:

Discharge letters saying 'the patient was here for chemotherapy and we gave so-and-so many milligrams of these seven drugs' […] they don't give a damn […] what is important to them, is what we talk about in consultations like these […] We would never mention chemo doses in a dialogue like this (Oncologist)

Theme 6: Needs for redesigning the model

First, overcoming all the technical problems was an urgent prerequisite for implementation. Second, selection of the right patients was underlined. Bypassing low-complexity cases and those already treated well by their GP were proposed, but not agreed on. Several examples of 'the right time' for a Partnership consultation were mentioned: in case the patient needs to re-establish the contact to and trust in their GP, when the GP is apparently in doubt about his/her role and expertise and has questions to the oncologist, a handover of the patient and responsibility are to take place, the patient is in a vulnerable situation waiting and hoping for the blood counts to come into level before starting treatment, and obviously, if the patient is severely ill by cancer or complex comorbidity. Furthermore, scheduling these consultations at the beginning of a day was mentioned as a way of easing the challenge of two professionals being ready at the same time.

DISCUSSION

This study explored oncologists' and specialist nurses' experiences and perspectives of a new way of cross-sector communication established by inviting GPs by video for patient encounters. The concept was deemed feasible and useful but gave rise to several challenges. As patients not always have a supportive experience of their GP, a variety of patient-GP relationships were to be embraced professionally. Case-specific tasks and organizational stressors were targeted by pragmatically rethinking protocol expectations, and flow and communication of usual encounters. Centered around 12-15 minutes shared by video, Partnership consultations included up to five phases. Technical problems challenged professional roles. Case-selection was discussed as one way of maturing the concept for future use.

Strengths and limitations

We aimed to explore the perspectives of the oncology team only, either patient, relative or GP perspectives. Inviting both cancer specialist physicians and nurses for interview maximised the richness of our data. The sample succeeded to have male and female oncologists representing all

disease-specific teams. The female specialist nurses expressed the gender representation at this position, but not all teams. The informants' level of experience with Partnership consultations varied giving room for yet another variation. The interviewer succeeded to reach a relaxed atmosphere and a good group dynamic. However, being deeply involved in the RCT and having the local project leader (LHJ) as one of the informants could have compromised openness (21). Meanwhile, a range of experiences and perspectives were uncovered including critical statements. Each member had time to voice their views and the themes of the interview guide were covered. However, we may not be sure if we reached saturation (21). It was deemed fruitful for the analytical process that the authors represented a wide variety of medical and research experiences and actively reflected on their positions.
When interpreting the results, we need to be aware that selection processes left out experiences with patients and GPs unwilling to take part in the RCT, for example, some with strained relationships, or patients feeling weak. Furthermore, Vejle Hospital is known for being innovative and open-minded regarding cross-sectoral cooperation, shared decision-making (14), and patient-centered communication (27).

Discussion of results
By studying records of Partnership Interventions, we have previously shown that these consultations succeeded being patient-centered and supported the building of relationship between patient and GP, patient and oncologist, as well as between the two health care providers (24). Interviewing oncologists and specialist nurses added to the empirical evidence and process evaluation of the trial. Patients do not necessarily trust or know their GP, meaning that lack of confidence in the patient-GP relation is a potential challenge for these and similar tripartite consultations. A review has shown the significance of relationship and communication for patient satisfaction in oncology (28). Studies of video consultations have shown that patients benefitting most of this format were those with a good relation (29, 30). Including an extra health professional into the encounter meant embracing an unknown medical colleague as well as another professional relation – potentially closer, but sometimes tense or unfamiliar compared to their association with the patient. A review of the effectiveness of shared care models in cancer showing no effect on health outcomes argued that lack of confidence in primary care could have been an important confounding factor (6). Patients may stop seeing their GP when mistrusting their competences in cancer (31, 32). Furthermore inspired by communication guidelines for medical encounters, we suggest that articulation of the character of the patient-GP relation before and during the opening of a tripartite consultation may improve the atmosphere, patient satisfaction, and health outcomes (28, 33). Our finding challenges the general assumption of health care systems based on comprehensive primary care: patients have a family physician who they know well from the treatment of their illness, comorbidities, and trivialities (34). Care delivery through multidisciplinary teams in general practice may partly explain our observation (35, 36). Overlooking or neglecting the variety of patient-GP relationships may thus compromise the potential of future shared care strategies.

The literature on video consultations with patients at home have concluded that technical problems disrupt workflow, consultation process, and as highlighted by our informants, affect professional roles (8, 30, 37, 38). The need for a reliable, easy-to-use system before translation into clinical practice is indisputable (30). The COVID-19 pandemic has speeded up the integration

of video consultations in health care. New technologies are developed and much is learned (37, 39). We suggest, that also cross-sectoral use has become less discouraging to patients and professionals and even more relevant. To ensure user acceptability and system stability, we highly recommend exhaustive pilot-testing in the actual setting (17).

Reaching out for an external medical specialist waiting at a prescheduled time caused that being delayed was perceived as more burdensome than usual. A virtual waiting room has been introduced for patients waiting for online consultations but may not fully relieve specialists waiting for a tripartite consultation (29). However, leaning the concept by scheduling in early working hours may improve professional acceptability and reduce wasted time and stress levels.

Several studies have underlined the willingness of GPs to provide cancer care, but their professional confidence varies in line with the level of information and role clarification (3, 40). The latter are consistently deemed necessary for care coordination by both primary and secondary care professionals (41, 42). We have previously shown, that the participating physicians felt ready to unravel misconceptions, listen, and support each other (24). From the present study, new potential mechanisms of cross-sectoral consultations emerged. For the oncologists, bringing together was regarded as a way to come to understand patients' perception of being declined cancer-related support from their GP.

Perspectives for practice and research

In addition to already planned studies of the effectiveness of the Partnership Intervention and previous process evaluations (15, 23, 24), this study adds important knowledge regarding fidelity, acceptability, perceived usefulness, and needs for a redesign for future use (18). This new tool for communication and partnering disrupts the existing workflow and challenges the consultation structure, communication, and interpersonal relationship of existing oncological encounters. Acknowledging the variety of patient-GP relationships to be embraced and the introduction of new phases of the usual encounter may help comply with barriers and facilitators of the concept. Case-selection seems appealing for future models (43).

ADDITIONAL HEADINGS

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Conflicts of interests

None.

Contributors

All authors (DGH, TBT, JJS, JS, and LHJ) took part in the initiation and design of this study, the interpretation of data, and the critical revision of the manuscript for important intellectual content. LHJ and DGH recruited the study participants. DGH made all interviews and had full access to all the data in the study and took responsibility for the integrity of the data and the accuracy of the data analysis. DGH drafted the manuscript.

All authors have been involved in all phases of the RCT which this study is part of. TBT took lead on most practical and technical issues related to the intervention. TBT and LHJ promoted the trial at the department. DGH was the main supervisor for PhD student TBT.

Patient and public involvement

None.

Patient consent for publication

Not required

Ethics

At the time of oral invitation for an interview, all informants knew the Partnership intervention in detail from their clinical work. At the interview, all gave written informed consent for research use of the information shared during the interview.
According to EU and national Data Protection Regulations, the study was approved by the University of Southern Denmark Research & Advice Organisation, registration number 10.902.

Trial Registration

www.clincialtrials.gov, NCT02716168

Data availability statement

No data is available. Unfortunately, we are unable to share data, as we are limited under data sharing agreements that do not allow us to share the vendor data with third parties.

REFERENCES

1. Haggerty JL, Roberge D, Freeman GK, Beaulieu CJTAoFM. Experienced continuity of care when patients see multiple clinicians: a qualitative metasummary. 2013;11(3):262-71.
2. Grunfeld E. The two solitudes of primary care and cancer specialist care: is there a bridge? Curr Oncol. 2017;24(2):69-70.
3. Lawrence RA, McLoone JK, Wakefield CE, Cohn RJ. Primary Care Physicians' Perspectives of Their Role in Cancer Care: A Systematic Review. J Gen Intern Med. 2016;31(10):1222-36.
4. Dossett LA, Hudson JN, Morris AM, Lee MC, Roetzheim RG, Fetters MD, et al. The primary care provider (PCP)-cancer specialist relationship: A systematic review and mixed-methods meta-synthesis. CA Cancer J Clin. 2017;67(2):156-69.
5. Tomasone JR, Vukmirovic M, Brouwers MC, Grunfeld E, Urquhart R, O'Brien MA, et al. Challenges and insights in implementing coordinated care between oncology and primary care providers: a Canadian perspective. Curr Oncol. 2017;24(2):120-3.
6. Zhao Y, Brettle A, Qiu L. The Effectiveness of Shared Care in Cancer Survivors-A Systematic Review. Int J Integr Care. 2018;18(4):2.
7. Perfors IAA, May AM, Boeijen JA, de Wit NJ, van der Wall E, Helsper CW. Involving the general practitioner during curative cancer treatment: a systematic review of health care interventions. BMJ Open. 2019;9(4):e026383.
8. Voruganti T, Grunfeld E, Makuwaza T, Bender JL. Web-Based Tools for Text-Based Patient-Provider Communication in Chronic Conditions: Scoping Review. J Med Internet Res. 2017;19(10):e366.
9. Bergholdt SH, Larsen PV, Kragstrup J, Sondergaard J, Hansen DG. Enhanced involvement of general practitioners in cancer rehabilitation: a randomised controlled trial. BMJ Open. 2012;2(2):e000764.
10. Brennan ME, Gormally JF, Butow P, Boyle FM, Spillane AJ. Survivorship care plans in cancer: a systematic review of care plan outcomes. Br J Cancer. 2014;111(10):1899-908.
11. Tomasone JR, Brouwers MC, Vukmirovic M, Grunfeld E, O'Brien MA, Urquhart R, et al. Interventions to improve care coordination between primary healthcare and oncology care providers: a systematic review. ESMO Open. 2016;1(5):e000077.
12. Lawn S, Fallon-Ferguson J, Koczwara B. Shared care involving cancer specialists and primary care providers - What do cancer survivors want? Health Expect. 2017;20(5):1081-7.
13. Hong YA, Hossain MM, Chou WYS. Digital interventions to facilitate patient-provider communication in cancer care: a systematic review. Psycho-Oncology. 2019.
14. Steffensen KD, Vinter M, Cruger D, Dankl K, Coulter A, Stuart B, et al. Lessons in Integrating Shared Decision-Making Into Cancer Care. J Oncol Pract. 2018;14(4):229-35.
15. Trabjerg TB, Jensen LH, Sondergaard J, Sisler JJ, Hansen DG. Improving continuity by bringing the cancer patient, general practitioner and oncologist together in a shared video-based consultation - protocol for a randomised controlled trial. BMC Fam Pract. 2019;20(1):86.
16. Jess M, Timm H, Dieperink KB. Video consultations in palliative care: A systematic integrative review. Palliat Med. 2019:269216319854938.
17. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M, et al. Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ. 2008;337:a1655.
18. Moore GF, Audrey S, Barker M, Bond L, Bonell C, Hardeman W, et al. Process evaluation of complex interventions: Medical Research Council guidance. BMJ. 2015;350:h1258.
19. Malterud K. Theory and interpretation in qualitative studies from general practice: Why and how? Scand J Public Health. 2016;44(2):120-9.
20. Cyr J. The pitfalls and promise of focus groups as a data collection method. Sociological Methods & Research. 2016;45(2):231-59.
21. Vicsek L. Issues in the Analysis of Focus Groups: Generalisability, Quantifiability, Treatment of Context and Quotations. Qualitative Report. 2010;15(1):122-41.

22. Moser A, Korstjens I. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. European Journal of General Practice. 2018;24(1):9-18.
23. Trabjerg TB, Jensen LH, Søndergaard J, Sisler JJ, Hansen DG. Cross-sectoral video consultations in cancer care: perspectives of cancer patients, oncologists and general practitioners. Supportive Care in Cancer. 2020:1-10.
24. Trabjerg TB, Jensen LH, Sondergaard J, Trabjerg ND, Sisler JJ, Hansen DG. Investigating whether shared video-based consultations with patients, oncologists, and GPs can benefit patient-centred cancer care: a qualitative study. BJGP open. 2020.
25. Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. Perspectives on Medical Education. 2019;8(2):90-7.
26. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-51.
27. Ammentorp J, Graugaard LT, Lau ME, Andersen TP, Waidtløw K, Kofoed P-E. Mandatory communication training of all employees with patient contact. Patient education and counseling. 2014;95(3):429-32.
28. Prip A, Møller KA, Nielsen DL, Jarden M, Olsen M-H, Danielsen AK. The Patient–Healthcare Professional Relationship and Communication in the Oncology Outpatient Setting: A Systematic Review. Cancer nursing. 2018;41(5):E11.
29. Greenhalgh T, Shaw S, Wherton J, Vijayaraghavan S, Morris J, Bhattacharya S, et al. Real-World Implementation of Video Outpatient Consultations at Macro, Meso, and Micro Levels: Mixed-Method Study. J Med Internet Res. 2018;20(4):e150.
30. Donaghy E, Atherton H, Hammersley V, McNeilly H, Bikker A, Robbins L, et al. Acceptability, benefits, and challenges of video consulting: a qualitative study in primary care. Br J Gen Pract. 2019;69(686):e586-e94.
31. Mikkelsen T, Sondergaard J, Sokolowski I, Jensen A, Olesen F. Cancer survivors' rehabilitation needs in a primary health care context. Family practice. 2009;26(3):221-30.
32. Larsen MB, Hansen RP, Olesen F, Vedsted P. Patients' confidence in their GP before and after being diagnosed with cancer. Br J Gen Pract. 2011;61(586):e215-22.
33. Mitchell GK, Burridge LH, Colquist SP, Love A. General practitioners' perceptions of their role in cancer care and factors which influence this role. Health & social care in the community. 2012;20(6):607-16.
34. Pedersen KM, Andersen JS, Sondergaard J. General practice and primary health care in Denmark. J Am Board Fam Med. 2012;25 Suppl 1:S34-8.
35. Rubin G, Berendsen A, Crawford SM, Dommett R, Earle C, Emery J, et al. The expanding role of primary care in cancer control. Lancet Oncol. 2015;16(12):1231-72.
36. Wright M, Mainous III AG. Can continuity of care in primary care be sustained in the modern health system? Australian journal of general practice. 2018;47(10):667-9.
37. Greenhalgh Tea. Video consultations for covid-19. An opportunity in a crisis. BMJ. 2020;BMJ 2020;368:m998 doi: 10.1136/bmj.m998.
38. Funderskov KF, Raunkiær M, Danbjørg DB, Zwisler A-D, Munk L, Jess M, et al. Experiences With Video Consultations in Specialized Palliative Home-Care: Qualitative Study of Patient and Relative Perspectives. Journal of medical Internet research. 2019;21(3):e10208.
39. Thornton J. Covid-19: how coronavirus will change the face of general practice forever. Bmj. 2020;368.
40. Guassora AD, Jarlbaek L, Thorsen T. Preparing general practitioners to receive cancer patients following treatment in secondary care: a qualitative study. BMC Health Serv Res. 2015;15:202.
41. Easley J, Miedema B, O'Brien MA, Carroll J, Manca D, Webster F, et al. The role of family physicians in cancer care: perspectives of primary and specialty care providers. Curr Oncol. 2017;24(2):75-80.

42. Easley J, Miedema B, Carroll JC, Manca DP, O'Brien MA, Webster F, et al. Coordination of cancer care between family physicians and cancer specialists: Importance of communication. Can Fam Physician. 2016;62(10):e608-e15.
43. Nekhlyudov L, Mollica MA, Jacobsen PB, Mayer DK, Shulman LN, Geiger AM. Developing a quality of cancer survivorship care framework: implications for clinical care, research, and policy. JNCI: Journal of the National Cancer Institute. 2019;111(11):1120-30.

INTERVIEW GUIDES
DG Hansen et al

Interview guide – for interview of the oncologists
Thanks for taking part. Shortly about me and my involvement in the project.
Short presentation of participants (name, team, number of consultations within the project)

Please, tell openly about your experiences with Partnership consultations.

What happened?
Where was the patient placed and who participated?
What was your role?
Who talked – and with whom?
The content of the consultations. Did you talk about other topics than 'the usual'?
Did you use the consultation guide?
Were decisions and important agreements made? Were roles shared? Give some examples.
Would these decisions and agreements otherwise not have been made? Were notes added to the electronic patient record?
What happened before and after the GP showed up at the screen?

What did you think or expect before entering a project consultation? Did your expectations change during the project?
And what about your reflections at the end of a consultation?

Have you subsequently experienced talking with the patient about 'the day when your GP took part'?
How do you think the patients experienced having their GP onboard? Was it perceived beneficial to them?
And what about the relatives?

How did the GP participate in the dialogue?
Who gained something from the conversation? Did anyone feel safer afterward?
What did you get out of inviting the GP for a consultation?
What do you think the GP got out of it?
Is there something that you should be particularly cautious about when inviting the GP for a consultation?

What about your screen and the screenshot showing the GPs' surgery. How were they used?
What about the screenshot showing your office. Who was visible? Did it matter who was visible?

Were the consultations scheduled at relevant time points of the patient trajectories?
Did the project consultations end up being extra consultations for the patients?
What about your time spent on the project?

All things considered, have the consultations made any difference?
Could the same knowledge have been shared more simply?

Have you changed your behavior or attitudes to GPs' roles during cancer?

Did the specialist nurse play another role during the consultation than her usual?

Should there be 'a future' for these consultations at the Oncological department? (Amendments)
Is there a heartwarming story, a good case, or a situation that deserves to be underlined?

Other topics or experiences that we are missing?

We used video to bring the GP onboard a patient consultation. Can you see the potential of using video for consultations with patients being at home?

Interview guide - nurse specialists

Thanks for taking part. Shortly about me and my involvement in the project.
Short presentation of participants (name, team, number of consultations in the project)

Please, tell openly about your experiences with Partnership consultations.

What happened?
What happened before and after the contact with the general practitioner was established?
Your role?
Did you solve problems in other ways as compared to the usual encounters without the participation of a general practitioner?

Do you remember your thoughts and reflections when entering the encounter? Did these expectations change over time?
What did you think about the concept, after having participated yourself?

What kind of expectations did the other participants have to the encounters?

Have you subsequently experienced talking with the patients and their relatives about 'the day when your general practitioner took part'?
Have you got any feedback from the general practitioners? Or the oncologists?

Has involvement of the general practitioner made any difference – to

- Problem-solving in the department
- Enquiries from the patients
- Your thoughts about and expectations regarding general practitioners as health care partners to patients and their relatives
- Role clarification, and who should take on the different tasks
- Sharing of knowledge between the doctors
- The patients' perceptions of continuity of treatment and care. Their sense of security?

Were patients, doctors, and you ready to have the general practitioner onboard?

To your opinion, which parts of the consultations were the most meaningful and important?
Who was the key figure?

Your experiences of the screen. Did you use it more than at the beginning and the end of the video session?
Were the different participants ready for using video?

What is the most important you have learned by this project?

Which patients gained the most of these consultations?

Is it possible, that these consultations have had any negative influence? To the participants, the cooperation with general practice (patients' as well as yours), or the working flow at the department level?

To your opinion, should Partnership consultations be implemented in the department?

Any other topics or experiences that we are missing?

We used video to bring the GP onboard a patient consultation. Can you see the potential of using video for consultations with patients being at home?

COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the inter view or focus group?	
Duration	21	What was the duration of the inter views or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

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Cross-sectoral communication by bringing together cancer patient, general practitioner and oncologist in a video-based consultation. A qualitative study of oncologists' and nurse specialists' perspectives

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ABSTRACT

Shared care models in the field of cancer aim to improve care coordination, role clarification, and patient satisfaction. Cross-sectoral communication is pivotal. Involvement of patients may add to intended mechanisms.

A randomised controlled trial 'The Partnership Study' tested the effect of bringing together patient, general practitioner (GP) and oncologist for a consultation conducted by video.

Purpose

As part of the process evaluation, this study aimed to explore experiences, attitudes, and perspectives of the oncologic department on sharing patient consultations with GPs using video.

Methods

Four semi-structured interviews with five oncologists and four nurse specialists were conducted in February 2020. We focused on the informants' experiences and reflections on the potential of future implementation of the concept 'inviting the GP for a shared consultation by video'. The analyses were based on an inductive, open-minded, hermeneutic phenomenological approach.

Results

A total of six overall themes were identified: structuring consultation and communication, perceptions of GP involvement in cancer care, stressors, making a difference, alternative ways of cross-sector communication, and needs for redesigning the model. The concept made sense and was deemed useful but solving the many technical and organisational problems are pivotal. Case-specific tasks and relational issues were targeted by pragmatically rethinking protocol expectations and the usual way of communication and structuring patient encounters. Case-selection was discussed as one way of maturing the concept.

Conclusion

This Danish study adds new insight into understanding different aspects of the process, causal mechanisms as well as the potential of future implementation of video-based tripartite encounters. Beyond solving the technical problems, case-selection and organisational issues are important. Acknowledging the disruption of the usual workflow, the introduction of new phases of the usual encounter, and the variety of patient-GP relationships to be embraced may help to better understand and comply with barriers and facilitators of communication and sharing.

Key words

Cross-sector communication, cancer, oncology, primary care, video consultation, professional relationship, shared care, patient involvement, qualitative research

STRENGTHS AND LIMITATIONS OF THE STUDY

- Process evaluation of a RCT is key to understanding intervention mechanisms
- Results may apply to other areas of shared care
- Knowledge on tripartite video consultations is sparse
- Informants were restricted to the oncological team
- Some perspectives may have been overlooked

KEY POINTS

- The role of the GP during cancer treatment is often unclear to patients and health professionals. Cross-sectorial communication rarely actively include the cancer patient.
- An innovative way of cross-sector communication during chemotherapy took outset in an invitation of the GP to take part in a patient consultation by video
- From the oncological perspective, the concept was deemed useful.
- The variety of relationships between patients and general practitioners needs acknowledgment.
- Organisational, case-related, and relational stressors in addition to the many technical challenges gave rise to suggestions of case-selection and logistical refinements

BACKGROUND

Continuity of care is a huge challenge for all health care systems as well as for many patients with chronic disorders like cancer(1). In periods with intensive treatment in hospital, it is often unclear to patients who will take care of their comorbidities and psychosocial aspects of living with a life-threatening disorder(2). The integration of general practitioners (GPs) into survivorship care is needed and underpinned internationally(3). However, GPs may feel insufficiently informed by specialists and thereby be left with an unclearly defined role (4, 5).

Various shared care models have been developed in the field of cancer, primarily involving the GP and specialist in a formal explicit manner (6-8). Communication between them through the exchange of information and arranging responsibility to improve the follow-up management has been in focus (7). Formal communication channels have been defined by discharge letters, cancer care plans, electronic platforms for text messaging, or phone calls from nurse specialists (9-11). Reviews have concluded that these different models enable GPs' involvement in survivorship care and help the cooperation between the hospital and primary care (7, 8, 11, 12). However, patients themselves have only been scarcely involved and no significant improvement in quality of life has been observed(7, 8).

During the last decade, there has been increasing attention to patient involvement and shared decision-making in clinical oncology. Studies have stressed the importance of patient-centered communication, preparing patients for self-management, and knowing who is going to help with what aspects of future treatment (13, 14). Having patient-centeredness as a key value of health care, we developed a shared care model based on a formal way of cross-sector communication giving room for engagement of the patient (15). Being aware of geographical constraints, but appreciating the living dialogue and seeing each other, we designed an intervention bringing cancer patient, GP and oncologist together in a virtual room using video (16, 17). Oncologists invite GPs to participate in usual patient encounters, so that they may share knowledge and divide on responsibility and specific tasks during treatment and survivorship. A randomised controlled trial has been carried out to test this intervention(16).

As outlined in the Medical Research Council Guidelines for complex interventions, process evaluation is an important part of trial evaluation (18). To fully understand trial mechanisms, acceptability, user perspectives, and clues for future implementation strategies, tailored research should capture what was delivered and understand complex pathways (19).

AIMS

As part of the process evaluation of the Partnership Study(16), this paper aimed to explore experiences, attitudes, and perspectives of doctors and nurses working in clinical oncology on sharing patient consultations with general practitioners using video.

MATERIAL AND METHODS

The empiric data was sampled by interviewing oncologists and specialist nurses who have participated in the tripartite consultations carried out as part of the 'Partnership Study'.

The Partnership Study

The design of the RCT has been described in detail elsewhere (16). To put it briefly, GPs of the 140 adult cancer patients allocated to the intervention arm were invited by the oncological department at Vejle Hospital to one of the consultations during treatment with chemotherapy. The patients could choose to sit by the oncologist or by the GP, the latter chosen by one fifth. The overall aim of the trial was to assess the impact of the shared consultation on patient-perceived inter-sectoral cooperation and continuity of care, cancer-related distress, and health-related quality of life. Based on a patient-centered approach, sharing a consultation with the two professionals should help to clarify the roles and tasks of the GP and oncologist, respectively, thereby improving patient comfortability with future treatment. At the same time, professionals could share relevant knowledge. Before each consultation, the oncologist and GP were handed a short consultation guide informing about consultation structure, aim, and potential themes (Box 1).

INSERT BOX 1 HERE

Box 1 Consultation guide including a list of potential themes presented for the general practitioners and oncologists before the Partnership consultation.

Consultation structure, aim, and content

- The oncologist acts as chair of the shared video consultation
- The duration of the consultation should be 10-20 minutes
- The oncologist started by introducing the participants and the purpose of the shared consultation:
  - Exchange of information between all participants for the benefit of the patient
  - Role and tasks clarification between the Oncology Department and the general practitioner
- The consultations conclude with a summary where it is clarified whether a follow-up is needed at the general practitioner or Oncology Department
- The consultation and its agreements are documented in the hospital electronic patient record, sent to the general practitioner and made available for the patient

Potential themes for the consultation:

- A summary of the patient trajectory
- Patient concerns and desire for the consultation
- Sharing knowledge regarding comorbidity
- Psychosocial resources and needs
- Agreements on who should take care of what and when in the future
- Physical wellbeing

- Medicine
- Psychological wellbeing
- Relatives
- Ability to work
- Late complications and side effects of the treatment
- Other

Due to 21 GPs' declination to participate, patient death, and cancer severity, 79 consultations were conducted by 14 doctors (12 oncology specialists and two trainees). According to department routines, they were assisted by a nurse specialist. An unknown number of nurse specialists were involved in patient enrolment and the consultations.
As usual, patients were invited to bring along relatives.

Participant recruitment
Local key informants from the department were invited by LHJ (doctors) and a team-leading nurse specialist (nurses). Informants were selected purposively to be representative regarding gender and the disease-specific oncological teams.

Data sampling
Shortly after the last Partnership Intervention had taken place DGH conducted four semi-structured focus group interviews with five oncologists and four specialist nurses at Vejle Hospital. It was in February 2020, just before the COVID-19 pandemic reached Denmark. DGH introduced herself as MD with a long research career within family medicine and cancer, principal supervisor for PhD student TBT, and deeply involved in the project. Coffee and small talk were shared to establish a comfortable environment. The participants were encouraged to speak freely and honestly. The conversation was based on the predetermined open-ended questions of the interview guide and other issues emerging from the dialogue (20) (Supplementary file 1). The interview guide was defined by DGH and JS. Trained in focus group interviewing, DGH simultaneously observed the interaction dynamics within the groups (21). Due to practical reasons and considerations about the hierarchical nature of participants, oncologists and nurse specialists were grouped separately (20, 22). None besides interviewer and informants were present.

As planned, the interviews took 45-55 minutes. No repeat interviews were carried out. The preliminary data analysis coincided with data collection.

The interviews were audiotaped and transcribed verbatim by a trained research assistant (23). Transcripts were not returned to informants for comments.

Further on researcher characteristics and reflexivity
Trial ownership, workplace relationship with informants, medical specialization and hierarchical structures may be potential sources of bias. All authors are owners of the trial and have been deeply involved in planning and implementation of the RCT: DGH with the role as main supervisor for PhD student TBT, and LHJ as chief specialist at the Oncological Department. In these roles, LHJ and TBT facilitated professional engagement, patient enrollment, and technical issues. The

professors JS and JJS have a long clinical career in family medicine and cancer research. During the analytical phase, we repeatedly reflected on these potential sources of bias.

The process of analyzing and reporting

The analyses were based on an inductive, hermeneutic phenomenologic approach (23, 24). After each interview, DGH familiarised with data by listening reflectively to the audio recordings and making interpretive notes. Themes, patterns, and codes emerged. She continued with a careful reading of the transcripts, iteratively defining and organizing codes into meaning-bearing entities. This data managing was supported by the software NVivo12. Based on manuscript drafts, themes, codes, and meanings were discussed orally and by e-mail with co-authors resulting in minor reorganization and rephrasing. Subsequently, the number of quotations was reduced to one third. Half-finished sentences and irrelevant wording were removed and replaced by "[…]". Finally, DGH checked the grounding of the results in the empirical material (21).

In the double role of co-author and informant, LHJ did the member checking. All co-authors were involved in study designing and gave critical comments to manuscripts.

The reporting of the study follows the SRQR Standards for Reporting Qualitative Research (25) and includes the COREQ checklist (Supplementary file 2).

Patient and public involvement

None for this particular paper, but representatives from the Patient and Relatives Council at the Hospital took part in unfolding the conceptual idea of the intervention, were involved in the pilot study including revision of questionnaires (content, way of administration, and lay-out) and revision of intervention components. Furthermore, a workshop with the Patient and Relatives Council is planned when the final results from the RCT are ready (late 2021).

RESULTS

The length of the interviews was regarded as adequate. A relaxed atmosphere and good group dynamic were reached giving room for synergistic thoughts and exchange of views.

Thoughts pop up in your mind when you start talking about it. Lots of ideas (Specialist nurse)

In most cases, the informants referred to cases with the patient placed at the oncologic department. During the analysis, 15 categories and six overall themes emerged (Table 1).

[INSERT Table 1]

Table 1. Overall themes and categories defined by the analysis of focus group interview with oncologists and nurse specialist experienced with the Partnership intervention bringing together patient, GP and oncologist for a consultation shared by video

Overall themes	Categories
Structuring consultation and communication	Tailoring to individual tasks
	Rethinking the usual encounter
Perceptions of GP involvement in cancer care	The patient-GP relationship
	GP behaviour
	Premises for the consultation
Stressors	Technical stressors
	Organisational stressors
	Case-related stressors
Making a difference	At group level
	At the individual level
Alternative ways of cross-sector communication	Workshops
	Phone calls
	Discharge letters
Needs for redesigning the model	Urgent Prerequisites
	Wanted changes

GP: general practitioner

Theme 1: Structuring the consultation and communication

Tailoring to individual tasks

The oncologists remembered the consultation guide. However, they had quickly 'found their own way' of conducting these consultations and pragmatically tailored protocol expectations to organizational issues and specific tasks. Some oncologists preferred to explain topics as CT scans to patients without having the GP onboard. Private pre- and post- discussions with the patient were thereby introduced:

In case there was a scan result I discussed it with them [patient and relatives] before, so they were not - so to speak - not taken hostage in the conversation, […] and then after a short time I call the GP; and then finish afterward, conclude with a summary and by asking if there is anything I should know when their GP is not there (Oncologist)

Rethinking the usual encounter

From the department perspective, a Partnership consultation with the patient placed at the department was framed with three to five phases: The oncologist 1) had a short dialogue with the specialist nurse, 2) included patient and relatives, 3) continued with the shared part of the consultation having the GP onboard, 4) finished having some extra time with patient and relative, and 5) left the room leaving the patient and relative together with the specialist nurse. In case the patient was sitting by the GP, only phases 1 and 3 came into play, eventually finished with a short dialogue between oncologist and nurse specialist.

All informants agreed that the oncologist had been the leader of the consultation and that the patient was in focus. To a varying degree, the GPs 'took their time', often in the second half of the consultation. Also remembered were situations where the GP partly took over:

He [the GP] talked a lot with the patient. I was side-lined, but, but I don't think it mattered (Oncologist)

Regarding communication, additional efforts were put into addressing the different interests, expectations, and premises that patients and GPs represented:

[…] in a situation like this you make much of an effort to be - even more - pedagogical, for both the patient and the GP (Oncologist)

Theme 2: Perceptions of GP involvement in cancer care

The patient-GP relationship

A variety of patient-GP relationships were to be embraced. Some patients had clearly explained their relational situation beforehand. Others did so during study enrolment or the introductory phase of the consultation. In addition to well-established professional relations, the informants told of patients that had not been in contact with their GP during the cancer treatment or even since long before diagnosis:

If you don't have a good relation with your doctor, if you don't know … or haven't visited much […]. In some way, it is a stranger sitting by (Specialist nurse)

Some patients distrusted their GP due to a diagnostic phase that in their opinion had been too long or included misunderstandings. The oncologists thought those patients had denied participating, or their GP had. However, the specialist nurses told them they had thoroughly recommended them to participate and were impressed by their courage to participate. They were very aware of challenges and tensions during these consultations.

GP behavior

The large heterogeneity in GPs' behaviour and in patients' perception of the GPs' role was discussed. Some GPs saw the patient regularly. Other GPs had given the patient the impression of being unwilling 'to take part' and 'take on responsibility' during the oncological treatment - for example of pain and treatment-related hypertension.

What does it mean when the patient says, 'my GP is not willing to help me with this'? In fact, I don't think it is true (Oncologist)

Premises for the consultation

Thus, from time to time complex aspects of the patient-GP relationship were premises for the consultations. Although not always understanding the relational tensions and what was meant by the GPs, attention was paid to barriers and facilitators to the communication.

Theme 3: Stressors

All informants were concerned about the stress by the inclusion of video and the GP as a third party.

Technical Stressors

Technical issues related to the video connection were time-consuming, frustrating, affecting their professionalism, and sometimes unsolvable.

> […] consultations went wrong. You know, we failed to get in contact at all. I also had some …we ended up calling by phone and talked without video […] so frustrating […] you get behind schedule ... knowing that somebody is at the other end, waiting, and wasting time, and the patient is just sitting, looking. It is incredibly unprofessional *(Oncologist)*

Organisational stressors

The informants all recognised tight ambulatory schedules and being routinely behind time. A Partnership consultation was a clinical obligation, time-fixed like multidisciplinary team (MDT) conferences or encounters using external interpreting services. However, knowing that *an external colleague* was expecting them at a specific time was perceived as extraordinarily stressful.

The informants were used to encounters partly defined by protocols. Integrating too many things and concepts into one encounter could be challenging and set participants under pressure. However, beyond the critical technical issues, the extra topics of a Partnership Intervention were acceptable, and the typical length of 12-14 minutes referred to as appropriate.

Both internal and external organisational stressors had the potential of compromising the conceptual idea of the Partnership consultation. The GP and his or her level of calmness, engagement, or irritation, was mentioned. However, using a lot of effort, they typically succeeded to overcome starting problems.

Case-related stressors

Case-related stressing factors included situations where the oncologist experienced no apparent need for having the GP onboard: low-complex cases like otherwise healthy females with breast cancer, and patients already well supported by the GP. These situations were by some informants perceived a wrong prioritisation of their professional time.

> *In case the patient has no problems, the aim of the consultation becomes somewhat forced (oncologist)*

Especially if a difficult message had to be communicated, it called for extra attention when having a third part in the room:

In case you are focusing on the patient when breaking bad news, it is difficult to keep an eye on the GP, too (Oncologist)

Theme 4: Making a Difference

The Partnership Interventions were deemed useful in several ways regarding individual trajectories. Furthermore, at a group level, they had the potential to make a difference for future patients. Getting more insight into GPs' competences and areas of concerns by meeting them in action changed habits and professional persuasions:

I have become aware of […] how much they [the GPs] engage, counsel, and support. I have seen some very skilled and very empathic GPs […]. Previously, I could not advise the patients about that. I quickly said 'let us ask the palliative team'. (Specialist nurse)

Previously, when I said 'try consulting your GP', I felt as if I pushed it out of my mind, but now… I say so because.. it will work out better […]. It is not a bad solution, or because I am lazy (Oncologist)

Several examples were given regarding how a Partnership consultation was perceived as useful to the patient. Being together paved the way for overcoming mistrust. Allowing the GP to empathetically welcome the patient and relatives for psychosocial and palliative care and underline their role and comfortability treating comorbidities, cancer pain, etc were other examples. However, to what degree the Partnership consultation had been pivotal to the informants was more unclear. In many cases, relationships were long-established and things organized beforehand.

A few extraordinary examples were remembered like one with a drug-addicted patient. According to the oncologist, sharing that dialogue about future prescribing of pain killers was very meaningful and would never have happened without this project.

Completing a long-lasting trajectory was easier for both patient and oncologist when convinced about the GP's role, readiness, and competences. Partnership consultations thus provided a measure of relief to the oncologist.

With the exception of one oncologist, the informants broadly agreed that having the GP onboard a patient consultation using video was worth implementing in routine clinical practice – in a structured way.

A scheduled appointment. I know that the doctor at the other end has time and that I have time. You see, that is perfect. I think we talk way too little with the GPs. Way too little (Oncologist)

Clues to implementation

Before discussing the need for redesigning the concept, the oncologists challenged alternative models of communication and partnering with GPs. However, all compromised the conceptual idea of patient-centeredness.

Theme 5: Alternative ways of cross-sectoral communication

Workshops for GPs were mentioned as one way of partnering at a general level. Calling the GP by phone was discussed as a more flexible way of professional sharing regarding individual patients. Relating to the perceived relevance of what was talked about during Partnership consultations, an oncologist criticised their discharge summaries to GPs. Laughing, the group agreed to them being useless alternatives:

Discharge letters saying 'the patient was here for chemotherapy and we gave so-and-so many milligrams of these seven drugs' […] they don't give a damn […] what is important to them, is what we talk about in consultations like these […] We would never mention chemo doses in a dialogue like this (Oncologist)

Theme 6: Needs for redesigning the model

First, overcoming all the technical problems was an urgent prerequisite for implementation. Second, selection of the right patients was underlined. Bypassing low-complexity cases and those already treated well by their GP were proposed, but not agreed on. Several examples of 'the right time' for a Partnership consultation were mentioned: in case the patient needs to re-establish the contact to and trust in their GP, if the GP is in doubt about his/her role and expertise and has questions to the oncologist, if a handover of the patient and responsibility is to take place, if the patient is in a vulnerable situation waiting for the blood counts to come into level before starting treatment, and obviously, if the patient is severely ill by cancer or complex comorbidity. Furthermore, scheduling these consultations at the beginning of a day was mentioned as a way of easing the challenge of two professionals being ready at the same time.

DISCUSSION

This study explored oncologists' and specialist nurses' experiences and perspectives of a new way of cross-sector communication established by inviting GPs by video for patient encounters. The concept was deemed feasible and useful but gave rise to several challenges. As patients not always have a supportive experience of their GP, a variety of patient-GP relationships were to be embraced professionally. Case-specific tasks and organizational stressors were targeted by pragmatically rethinking protocol expectations, and flow and communication of usual encounters. Centered around 12-15 minutes shared by video, Partnership consultations included up to five phases. Technical problems challenged professional roles. Case-selection was discussed as one way of maturing the concept for future use.

Strengths and limitations

We aimed to explore the perspectives of the oncology team only, either patient, relative or GP perspectives. Inviting both cancer specialist physicians and nurses for interview maximised the

richness of our data. The sample succeeded in having male and female oncologists representing all disease-specific teams. The female specialist nurses expressed the gender representation at this position, but not all teams. The informants' level of experience with Partnership consultations varied giving room for yet another variation. The interviewer managed to reach a relaxed atmosphere and a good group dynamic. However, being deeply involved in the RCT and having the local project leader (LHJ) as one of the informants could have compromised openness (22). Meanwhile, a range of experiences and perspectives were uncovered including critical statements. Each member had time to voice their views and the themes of the interview guide were covered. However, we may not be sure if we reached saturation (22). It was deemed fruitful for the analytical process that the authors represented a wide variety of medical and research experiences and actively reflected on their positions.

When interpreting the results, we need to be aware that selection processes left out experiences with patients and GPs unwilling to take part in the RCT, for example, some with strained relationships, or patients feeling weak. Furthermore, Vejle Hospital is known for being innovative and open-minded regarding cross-sectoral cooperation, shared decision-making (15), and patient-centered communication (26). In more conservative hospitals, resistance to this type of innovation may be larger.

Discussion of results

By studying records of Partnership Interventions, we have previously shown that these consultations succeeded in being patient-centered and supported the building of relationship between patient and GP, patient and oncologist, as well as between the two health care providers (27). Interviewing oncologists and specialist nurses added to the empirical evidence and process evaluation of the trial. Patients do not necessarily trust or know their GP, meaning that lack of confidence in the patient-GP relation is a potential challenge for these and similar tripartite consultations. A review has shown the significance of relationship and communication for patient satisfaction in oncology (28). Studies of video consultations have shown that the patients who benefit the most from this format are those with a good relation (29, 30). Including an extra health professional into the encounter meant embracing an unknown medical colleague as well as another professional relation – potentially closer, but sometimes tense or unfamiliar compared to their association with the patient. A review of the effectiveness of shared care models in cancer showing no effect on health outcomes argued that lack of confidence in primary care could have been an important confounding factor (7). Patients may stop seeing their GP when mistrusting their competences in cancer (31, 32). Furthermore, inspired by communication guidelines for medical encounters we suggest that articulation of the character of the patient-GP relation before and during the opening of a tripartite consultation may improve the atmosphere, patient satisfaction, and health outcomes (28, 33). Our finding challenges the general assumption of health care systems based on comprehensive primary care: patients have a family physician who they know well from the treatment of their illness, comorbidities, and trivialities (34). Care delivery through multidisciplinary teams in general practice may partly explain our observation (3, 35). Overlooking or neglecting the variety of patient-GP relationships may thus compromise the potential of future shared care strategies.

The literature on video consultations with patients at home have concluded that technical problems disrupt workflow, consultation process, and as highlighted by our informants, affect

professional roles (9, 30, 36, 37). The need for a reliable, easy-to-use system before translation into clinical practice is indisputable (30). The COVID-19 pandemic has sped up the integration of video consultations in health care. New technologies are developed and much is learned (36, 38). We suggest that also cross-sectoral use has become less discouraging to patients and professionals and even more relevant. To ensure user acceptability and system stability, we highly recommend exhaustive pilot-testing in the actual setting (18).

The delay that often arise during working days was perceived more burdensome than usual knowing that an external medical specialist would need to wait. A virtual waiting room has been introduced for patients waiting for online consultations but may not fully relieve specialists waiting for a tripartite consultation (29). However, optimising the concept by scheduling in early working hours may improve professional acceptability and reduce wasted time and stress levels.

Several studies have underlined the willingness of GPs to provide cancer care, but their professional confidence varies in line with the level of information and role clarification (4, 39). The latter are consistently deemed necessary for care coordination by both primary and secondary care professionals (40, 41). We have previously shown that the participating physicians feel ready to unravel misconceptions, listen, and support each other (27). From the present study, new potential mechanisms of cross-sectoral consultations emerged. For the oncologists, bringing together was regarded as a way to come to understand patients' perception of being declined cancer-related support from their GP.

Perspectives for practice and research

In addition to planned studies of the effectiveness of the Partnership Intervention and previous process evaluations (16, 27, 42), this study adds important knowledge regarding fidelity, acceptability, perceived usefulness, and needs for a redesign for future use (19). This new tool for communication and partnering disrupts the existing workflow and challenges the consultation structure, communication, and interpersonal relationship of existing oncological encounters. Acknowledging the variety of patient-GP relationships to be embraced and the introduction of new phases of the usual encounter may help comply with barriers and facilitators of the concept. Case-selection seems appealing for future models (43).

ADDITIONAL HEADINGS

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Conflicts of interests

None.

Contributors

All authors (DGH, TBT, JJS, JS, and LHJ) took part in the initiation and design of this study, the interpretation of data, and the critical revision of the manuscript for important intellectual content. LHJ and DGH recruited the study participants. DGH made all interviews and had full access to all the data in the study and took responsibility for the integrity of the data and the accuracy of the data analysis. DGH drafted the manuscript.

All authors have been involved in all phases of the RCT which this study is part of. TBT took lead on most practical and technical issues related to the intervention. TBT and LHJ promoted the trial at the department. DGH was the main supervisor for PhD student TBT.

Patient consent for publication

Not required

Ethics

At the time of oral invitation for an interview, all informants knew the Partnership intervention in detail from their clinical work. At the interview, all gave written informed consent for research use of the information shared during the interview.
According to EU and national Data Protection Regulations, the study was approved by the University of Southern Denmark Research & Advice Organisation, registration number 10.902.

Trial Registration

www.clincialtrials.gov, NCT02716168

Data availability statement

No data is available. Unfortunately, we are unable to share data, as we are limited under data sharing agreements that do not allow us to share the vendor data with third parties.

REFERENCES

1. Haggerty JL, Roberge D, Freeman GK, Beaulieu CJTAoFM. Experienced continuity of care when patients see multiple clinicians: a qualitative metasummary. 2013;11(3):262-71.
2. Grunfeld E. The two solitudes of primary care and cancer specialist care: is there a bridge? Curr Oncol. 2017;24(2):69-70.
3. Rubin G, Berendsen A, Crawford SM, Dommett R, Earle C, Emery J, et al. The expanding role of primary care in cancer control. Lancet Oncol. 2015;16(12):1231-72.
4. Lawrence RA, McLoone JK, Wakefield CE, Cohn RJ. Primary Care Physicians' Perspectives of Their Role in Cancer Care: A Systematic Review. J Gen Intern Med. 2016;31(10):1222-36.
5. Dossett LA, Hudson JN, Morris AM, Lee MC, Roetzheim RG, Fetters MD, et al. The primary care provider (PCP)-cancer specialist relationship: A systematic review and mixed-methods meta-synthesis. CA Cancer J Clin. 2017;67(2):156-69.
6. Tomasone JR, Vukmirovic M, Brouwers MC, Grunfeld E, Urquhart R, O'Brien MA, et al. Challenges and insights in implementing coordinated care between oncology and primary care providers: a Canadian perspective. Curr Oncol. 2017;24(2):120-3.
7. Zhao Y, Brettle A, Qiu L. The Effectiveness of Shared Care in Cancer Survivors-A Systematic Review. Int J Integr Care. 2018;18(4):2.
8. Perfors IAA, May AM, Boeijen JA, de Wit NJ, van der Wall E, Helsper CW. Involving the general practitioner during curative cancer treatment: a systematic review of health care interventions. BMJ Open. 2019;9(4):e026383.
9. Voruganti T, Grunfeld E, Makuwaza T, Bender JL. Web-Based Tools for Text-Based Patient-Provider Communication in Chronic Conditions: Scoping Review. J Med Internet Res. 2017;19(10):e366.
10. Bergholdt SH, Larsen PV, Kragstrup J, Sondergaard J, Hansen DG. Enhanced involvement of general practitioners in cancer rehabilitation: a randomised controlled trial. BMJ Open. 2012;2(2):e000764.
11. Brennan ME, Gormally JF, Butow P, Boyle FM, Spillane AJ. Survivorship care plans in cancer: a systematic review of care plan outcomes. Br J Cancer. 2014;111(10):1899-908.
12. Tomasone JR, Brouwers MC, Vukmirovic M, Grunfeld E, O'Brien MA, Urquhart R, et al. Interventions to improve care coordination between primary healthcare and oncology care providers: a systematic review. ESMO Open. 2016;1(5):e000077.
13. Lawn S, Fallon-Ferguson J, Koczwara B. Shared care involving cancer specialists and primary care providers - What do cancer survivors want? Health Expect. 2017;20(5):1081-7.
14. Hong YA, Hossain MM, Chou WYS. Digital interventions to facilitate patient-provider communication in cancer care: a systematic review. Psycho-Oncology. 2019.
15. Steffensen KD, Vinter M, Cruger D, Dankl K, Coulter A, Stuart B, et al. Lessons in Integrating Shared Decision-Making Into Cancer Care. J Oncol Pract. 2018;14(4):229-35.
16. Trabjerg TB, Jensen LH, Sondergaard J, Sisler JJ, Hansen DG. Improving continuity by bringing the cancer patient, general practitioner and oncologist together in a shared video-based consultation - protocol for a randomised controlled trial. BMC Fam Pract. 2019;20(1):86.
17. Jess M, Timm H, Dieperink KB. Video consultations in palliative care: A systematic integrative review. Palliat Med. 2019:269216319854938.
18. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M, et al. Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ. 2008;337:a1655.
19. Moore GF, Audrey S, Barker M, Bond L, Bonell C, Hardeman W, et al. Process evaluation of complex interventions: Medical Research Council guidance. BMJ. 2015;350:h1258.
20. Malterud K. Theory and interpretation in qualitative studies from general practice: Why and how? Scand J Public Health. 2016;44(2):120-9.
21. Cyr J. The pitfalls and promise of focus groups as a data collection method. Sociological Methods & Research. 2016;45(2):231-59.

22. Vicsek L. Issues in the Analysis of Focus Groups: Generalisability, Quantifiability, Treatment of Context and Quotations. Qualitative Report. 2010;15(1):122-41.
23. Moser A, Korstjens I. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. European Journal of General Practice. 2018;24(1):9-18.
24. Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. Perspectives on Medical Education. 2019;8(2):90-7.
25. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-51.
26. Ammentorp J, Graugaard LT, Lau ME, Andersen TP, Waidtløw K, Kofoed P-E. Mandatory communication training of all employees with patient contact. Patient education and counseling. 2014;95(3):429-32.
27. Trabjerg TB, Jensen LH, Sondergaard J, Trabjerg ND, Sisler JJ, Hansen DG. Investigating whether shared video-based consultations with patients, oncologists, and GPs can benefit patient-centred cancer care: a qualitative study. BJGP open. 2020.
28. Prip A, Møller KA, Nielsen DL, Jarden M, Olsen M-H, Danielsen AK. The Patient–Healthcare Professional Relationship and Communication in the Oncology Outpatient Setting: A Systematic Review. Cancer nursing. 2018;41(5):E11.
29. Greenhalgh T, Shaw S, Wherton J, Vijayaraghavan S, Morris J, Bhattacharya S, et al. Real-World Implementation of Video Outpatient Consultations at Macro, Meso, and Micro Levels: Mixed-Method Study. J Med Internet Res. 2018;20(4):e150.
30. Donaghy E, Atherton H, Hammersley V, McNeilly H, Bikker A, Robbins L, et al. Acceptability, benefits, and challenges of video consulting: a qualitative study in primary care. Br J Gen Pract. 2019;69(686):e586-e94.
31. Mikkelsen T, Sondergaard J, Sokolowski I, Jensen A, Olesen F. Cancer survivors' rehabilitation needs in a primary health care context. Family practice. 2009;26(3):221-30.
32. Larsen MB, Hansen RP, Olesen F, Vedsted P. Patients' confidence in their GP before and after being diagnosed with cancer. Br J Gen Pract. 2011;61(586):e215-22.
33. Mitchell GK, Burridge LH, Colquist SP, Love A. General practitioners' perceptions of their role in cancer care and factors which influence this role. Health & social care in the community. 2012;20(6):607-16.
34. Pedersen KM, Andersen JS, Sondergaard J. General practice and primary health care in Denmark. J Am Board Fam Med. 2012;25 Suppl 1:S34-8.
35. Wright M, Mainous III AG. Can continuity of care in primary care be sustained in the modern health system? Australian journal of general practice. 2018;47(10):667-9.
36. Greenhalgh Tea. Video consultations for covid-19. An opportunity in a crisis. BMJ. 2020;BMJ 2020;368:m998 doi: 10.1136/bmj.m998.
37. Funderskov KF, Raunkiær M, Danbjørg DB, Zwisler A-D, Munk L, Jess M, et al. Experiences With Video Consultations in Specialized Palliative Home-Care: Qualitative Study of Patient and Relative Perspectives. Journal of medical Internet research. 2019;21(3):e10208.
38. Thornton J. Covid-19: how coronavirus will change the face of general practice forever. Bmj. 2020;368.
39. Guassora AD, Jarlbaek L, Thorsen T. Preparing general practitioners to receive cancer patients following treatment in secondary care: a qualitative study. BMC Health Serv Res. 2015;15:202.
40. Easley J, Miedema B, O'Brien MA, Carroll J, Manca D, Webster F, et al. The role of family physicians in cancer care: perspectives of primary and specialty care providers. Curr Oncol. 2017;24(2):75-80.
41. Easley J, Miedema B, Carroll JC, Manca DP, O'Brien MA, Webster F, et al. Coordination of cancer care between family physicians and cancer specialists: Importance of communication. Can Fam Physician. 2016;62(10):e608-e15.

42. Trabjerg TB, Jensen LH, Søndergaard J, Sisler JJ, Hansen DG. Cross-sectoral video consultations in cancer care: perspectives of cancer patients, oncologists and general practitioners. Supportive Care in Cancer. 2020:1-10.
43. Nekhlyudov L, Mollica MA, Jacobsen PB, Mayer DK, Shulman LN, Geiger AM. Developing a quality of cancer survivorship care framework: implications for clinical care, research, and policy. JNCI: Journal of the National Cancer Institute. 2019;111(11):1120-30.

Supplementary file 1
INTERVIEW GUIDES

Interview guide – for interview of the oncologists
Thanks for taking part. Shortly about me and my involvement in the project.
Short presentation of participants (name, team, number of consultations within the project)

Please, tell openly about your experiences with Partnership consultations.

- What happened?
- Where was the patient placed and who participated?
- What was your role?
- Who talked – and with whom?
- The content of the consultations. Did you talk about other topics than 'the usual'?
- Did you use the consultation guide?
- Were decisions and important agreements made? Were roles shared? Give some examples.
- Would these decisions and agreements otherwise not have been made? Were notes added to the electronic patient record?
- What happened before and after the GP showed up at the screen?

What did you think or expect before entering a project consultation? Did your expectations change during the project?
And what about your reflections at the end of a consultation?

Have you subsequently experienced talking with the patient about 'the day when your GP took part'?
How do you think the patients experienced having their GP onboard? Was it perceived beneficial to them?
And what about the relatives?

How did the GP participate in the dialogue?
Who gained something from the conversation? Did anyone feel safer afterward?
What did you get out of inviting the GP for a consultation?
What do you think the GP got out of it?
Is there something that you should be particularly cautious about when inviting the GP for a consultation?

What about your screen and the screenshot showing the GPs' surgery. How were they used?
What about the screenshot showing your office. Who was visible? Did it matter who was visible?

Were the consultations scheduled at relevant time points of the patient trajectories?
Did the project consultations end up being extra consultations for the patients?
What about your time spent on the project?

All things considered, have the consultations made any difference?
Could the same knowledge have been shared more simply?

Have you changed your behavior or attitudes to GPs' roles during cancer?

Did the specialist nurse play another role during the consultation than her usual?

Should there be 'a future' for these consultations at the Oncological department? (Amendments)
Is there a heartwarming story, a good case, or a situation that deserves to be underlined?

Other topics or experiences that we are missing?

We used video to bring the GP onboard a patient consultation. Can you see the potential of using video for consultations with patients being at home?

Interview guide - nurse specialists

Thanks for taking part. Shortly about me and my involvement in the project.
Short presentation of participants (name, team, number of consultations in the project)

Please, tell openly about your experiences with Partnership consultations.

What happened?
What happened before and after the contact with the general practitioner was established?
Your role?
Did you solve problems in other ways as compared to the usual encounters without the participation of a general practitioner?

Do you remember your thoughts and reflections when entering the encounter? Did these expectations change over time?
What did you think about the concept, after having participated yourself?

What kind of expectations did the other participants have to the encounters?

Have you subsequently experienced talking with the patients and their relatives about 'the day when your general practitioner took part'?
Have you got any feedback from the general practitioners? Or the oncologists?

Has involvement of the general practitioner made any difference – to

- Problem-solving in the department
- Enquiries from the patients
- Your thoughts about and expectations regarding general practitioners as health care partners to patients and their relatives
- Role clarification, and who should take on the different tasks
- Sharing of knowledge between the doctors
- The patients' perceptions of continuity of treatment and care. Their sense of security?

Were patients, doctors, and you ready to have the general practitioner onboard?

To your opinion, which parts of the consultations were the most meaningful and important?
Who was the key figure?

Your experiences of the screen. Did you use it more than at the beginning and the end of the video session?
Were the different participants ready for using video?

What is the most important you have learned by this project?

Which patients gained the most of these consultations?

Is it possible, that these consultations have had any negative influence? To the participants, the cooperation with general practice (patients' as well as yours), or the working flow at the department level?

To your opinion, should Partnership consultations be implemented in the department?

Any other topics or experiences that we are missing?

We used video to bring the GP onboard a patient consultation. Can you see the potential of using video for consultations with patients being at home?

COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	
Experience and training	5	What experience or training did the researcher have?	
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	
Sample size	12	How many participants were in the study?	
Non-participation	13	How many people refused to participate or dropped out? Reasons?	
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	
Field notes	20	Were field notes made during and/or after the inter view or focus group?	
Duration	21	What was the duration of the inter views or focus group?	
Data saturation	22	Was data saturation discussed?	
Transcripts returned	23	Were transcripts returned to participants for comment and/or	

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	
Description of the coding tree	25	Did authors provide a description of the coding tree?	
Derivation of themes	26	Were themes identified in advance or derived from the data?	
Software	27	What software, if applicable, was used to manage the data?	
Participant checking	28	Did participants provide feedback on the findings?	
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	
Data and findings consistent	30	Was there consistency between the data presented and the findings?	
Clarity of major themes	31	Were major themes clearly presented in the findings?	
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.