

# A Pilot Study of an Online Remote Consultation System for Specialized Cancer Pain Treatment: Trial in progress

Eriko Satomi<sup>1,2</sup>, Sayaka Arakawa<sup>1</sup>, Rumi Nishimura <sup>1</sup>,Yoshihisa Matsumoto<sup>3</sup>, Miyuki Sone <sup>4</sup>, Takeo Takahashi <sup>5</sup> and Research Group Collaborators on the Establishment of a Regional Collaboration System for Specialized Cancer Pain Treatment (22EA1004)

- 1. Department of Palliative Medicine, National Cancer Center Hospital, , Tokyo, Japan,
- 2. Department of Palliative Medicine, Juntendo University Graduate School, , Tokyo, Japan
- 3. Department of Palliative Therapy, Cancer Institute Hospital of Japanese Foundation for Cancer Research, Tokyo, Japan.
- 4. Department of Diagnostic Radiology, National Cancer Center Hospital, Tokyo, Japan
- 5. Department of Radiation Oncology, Saitama Medical Center, Saitama Medical University, Saitama, Japan.



## Introduction

### Cancer Pain management

- Approximately 70% of patients with advanced cancer have cancer pain, and half of all cancer patients in one month prior to death are in moderate pain in Japan.
- Cancer pain management by standard therapy based on the PROs was achieved in 87.9% (1)
- Some cases needed other specialized cancer pain treatments.

### Specialized cancer pain treatment

- Nerve blocks, vertebroplasty, arterial embolization, and methadone therapy are not well-known cancer pain management options for oncologists and primary care provider in Japan.
- The quality of cancer pain treatment in Japan varies by region and physician.

### Remote e-consult service “CHALLENGE-CanPain

- To resolve the disparities, we established a secure, Web-based e-consultation service “CHALLENGE-CanPain” that is used for cancer pain management by physicians.

## Aim

To assess the feasibility and impact of e-consultation system “CHALLENGE-CanPain” for specialized cancer pain management that is used by physicians.

## Study design

Observational study

## Eligibility criteria

Physicians who consulted on cancer pain treatment using e-consult system “CHALLENGE-CanPain” (Nov 2023-Dec 2027)

## Endpoints

### The primary outcome :

Percentage of consultation cases that were completed from consultation to response

### Secondary outcomes:

Reasons for use/ Background of the user requesting e-consultation/ Satisfaction (5-Likert scale)

Whether there is regional referral/Case outcome

## Discussion

The purpose of this study is to identify issues by utilizing a web-based system called “CHALLENGE-CanPain,” which enables consultation among physicians regarding specialized cancer pain management. Similar systems introduced in Canada(2) and the United States (3) have contributed to avoiding and reducing waiting times for specialist consultations in general practice. There are no previous studies on the introduction of such systems in cancer pain management and palliative care. This study is expected to provide insights for improving the quality of palliative care based on telemedicine in the future.

- ✓ Physicians can request e-consultation on:
  - ✓ Intractable cancer pain management
  - ✓ Submit patient-specific clinical questions to the specialist service using a standardized electronic form.
  - ✓ Palliative radiotherapy
  - ✓ Nerve blockade
  - ✓ Interventional Radiology
- ✓ Submit patient-specific clinical questions to the specialist service using a standardized electronic form.
  - ✓ digital images can be attached.
- ✓ Can select the specialist group with which you would like to consult.
  - ✓ Palliative care physician
  - ✓ Radilo-oncologist
  - ✓ Pain clinician
  - ✓ Interventionist

They can use these notifications to check the status of CHALLENGE-CanPain, log back into the system to check responses, and provide additional information as necessary. If the specialist or the consulting physician requests clarification or additional information, repeated communication may occur.

## Development of the e-consultation service “CHALLENGE-CanPain



<https://challenge-canpain.net/>

Challenge-CanPain



## Ethics and Grant

- This study protocol was approved by National Cancer Center Hospital Institutional Review Board (IRB6000-112)
- Grant for a Health, Labor, and Welfare Sciences Research Grant (19EA1011, 22EA1004)
- Competing interests: None declared

## References

1. Tagami K et al. Cancer Pain Management in Patients Receiving Inpatient Specialized Palliative Care Services. J Pain Symptom Manage. 2024 Jan;67(1):27-38.e1.
2. eConsult BASE™ <https://www.champlainbaseconsult.com/>
3. Doc2Doc <https://doc2dochealth.com/>

- ✓ Email notification that a CHALLENGE-CanPain consultation is awaiting review and response.
- ✓ The notification includes a link to a secure website.
- ✓ Based on the request and information provided, specialists will provide advice, which may include the following:
  - (a) Recommendations to avoid the need for an in-person consultation
  - (b) Requests for additional information before providing advice
  - (c) Recommendations for a formal referral
- ✓ Physicians who wish to consult with a specialist will receive email notifications at each stage.

After completing the consultation, before closing the case, the consulting physician will answer questions using a Likert scale regarding the ease of use and value of the electronic consultation service. Additionally, respondents are asked to indicate the impact of the advice received on the consulting physician's treatment plan and whether the recommended treatment was implemented. Respondents are encouraged to provide free-text comments.