

Appendix 1

Questionnaire

I. Overview of hospice and palliative care units

(1) What is the number of beds in the hospital and hospice/palliative care unit where you work?

| | | | |
|----------------|------|----------------------------------|------|
| Whole Hospital | beds | Hospice and Palliative Care Unit | beds |
|----------------|------|----------------------------------|------|

(2) In the hospice and palliative care unit where you work, to what extent did you accept admissions in FY2020 that were referred from outside your own facility? Please circle the approximate percentage.

| | | | | | | |
|-----------------|---------------------------|-----------------------|---------------------------------|---------------------------------|----------------------------------|-------------|
| 1. not accepted | 2. less than 20% accepted | 3. between 20% and 40 | 4. 40% or more but less than 60 | 5. 60% or more but less than 80 | 6. 80% or more but less than 100 | 7. 100% (%) |
|-----------------|---------------------------|-----------------------|---------------------------------|---------------------------------|----------------------------------|-------------|

II. We would like to ask you about the admission of patients with non-covered illnesses in the hospice and palliative care unit where you work

(1) In FY2020, have you ever accepted a patient with a non-quantifiable disease for admission?

| | |
|--------|--------|
| 1. Yes | 2. no. |
|--------|--------|

If you answered "1. Yes", please fill in (2), and if you answered "2. No", please fill in (3).

(2) If you answered "1. Yes" in (1) above, please answer the following questions.

In the hospice and palliative care unit where you work, how many patients with diseases not covered by the calculation are received?

| | |
|--|----------|
| chronic heart failure | patients |
| chronic respiratory failure | patients |
| chronic hepatic failure | patients |
| chronic renal failure without dialysis | patients |
| chronic renal failure with dialysis | patients |
| intractable neurological disease | patients |
| dementia | patients |
| Other | patients |

(3) Do you think it is necessary to be able to calculate the admission fee for palliative care wards in order to accept patients with non-compliant diseases for the purpose of palliative care?

| | | | | | |
|---------------------|--------------|-----------------------|---------------------------|------------------|-------------------------|
| 1. Necessary at all | 2. necessary | 3. necessary somewhat | 4. Not necessary somewhat | 5. Not necessary | 6. Not necessary at all |
|---------------------|--------------|-----------------------|---------------------------|------------------|-------------------------|

(4) I would like to ask you all a question. (4) We would like to ask you to consider the following questions.

If the palliative care fee can be calculated, we would like to admit patients for the purpose of palliative care.

What are your thoughts at this time? What are your thoughts at this time?

Please circle one item that applies.

| | | | | | |
|-----------------|------------|---------------------|-------------------------|----------------|-----------------------|
| 1. Very willing | 2. Willing | 3. Willing somewhat | 4. Not willing somewhat | 5. Not willing | 6. Not willing at all |
|-----------------|------------|---------------------|-------------------------|----------------|-----------------------|

(5) I would like to ask you all a question. If it becomes possible to calculate the fee for admission to a palliative care unit for patients with diseases not currently covered by the fee, what conditions and support do you think are necessary in the hospice/palliative care unit where you work in order to accept admission for the purpose of palliative care for patients who do not have a malignant tumor or acquired immunodeficiency syndrome (AIDS)? Please check all that apply. Please check all that apply.

| | 1.Necessary at all | 2.necessary | 3.necessary somewhat | 4.Not necessary somewhat | 5.Not necessary | 6.Not necessary at all |
|---|--------------------|---------------------|----------------------|--------------------------|-----------------------------|-------------------------|
| (1) chronic heart failure | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1. very necessary | 2. fairly necessary | 3. rather necessary | 4. rather Not necessary. | 5. not much. Not necessary. | 6. not at all necessary |
| (2) chronic respiratory failure | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |
| (3) chronic hepatic failure | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |

| | 1. very necessary | 2. fairly necessary | 3. rather necessary | 4. rather. Not necessary. | 5. not much. Not necessary. | 6. not at all necessary |
|---|-------------------|---------------------|---------------------|---------------------------|-----------------------------|-------------------------|
| (4) chronic renal failure without dialysis | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |
| (5) chronic renal failure with dialysis | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1. very necessary | 2. fairly necessary | 3. rather necessary | 4. rather. Not necessary. | 5. not much. Not necessary. | 6. not at all necessary |
| (6) intractable neurological disease | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |
| (7) Dementia | | | | | | |
| 1. Clarification of admission criteria | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. on symptom palliation, including disease pathophysiology and treatment | | | | | | |
| 2-1. Education and training system | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-2. Advice from experts in the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-3. Advice from experts outside the hospital | 1 | 2 | 3 | 4 | 5 | 6 |
| 2-4. Guidelines and guidance are available | 1 | 2 | 3 | 4 | 5 | 6 |

Table S1 Characteristics of the facilities accepting admission of non-cancer patients and those not accepting admission

| Characteristics | Facilities accepting non-cancer patients (n=40) | Facilities not accepting non-cancer patients (n=224) |
|---|---|--|
| Number of beds (means ± standard deviation) | | |
| Hospital | 314.0±244.9 | 336.8±221.6 |
| PCUs | 22.0±9.0 | 21.0±7.8 |
| Admissions referred from other hospitals in 2020, n (%) | | |
| 100% | 4 (10.0) | 9 (4.0) |
| 80% to less than 100% | 19 (47.5) | 50 (22.3) |
| 60% to less than 80% | 2 (5.0) | 40 (17.9) |
| 40% to less than 60% | 3 (7.5) | 25 (11.2) |
| 20% to less than 40% | 4 (10.0) | 27 (12.1) |
| Less than 20% | 5 (12.5) | 56 (25.0) |
| None | 1 (2.5) | 7 (3.1) |

PCUs, palliative care units.

Table S2 The number of non-cancer patients accepted for palliative care admission according to condition

| Conditions | Number of patients | Number of facilities |
|----------------------------------|--------------------|----------------------|
| CHF | 1 | 4 |
| | 2 | 2 |
| | 3 | 2 |
| | 18 | 1 |
| Chronic respiratory failure | 1 | 6 |
| | 2 | 3 |
| | 3 | 1 |
| | 13 | 1 |
| | 15 | 1 |
| Chronic hepatic failure | 1 | 2 |
| | 2 | 1 |
| | 3 | 1 |
| | 27 | 1 |
| CRF without dialysis | 3 | 1 |
| | 4 | 1 |
| CRF with dialysis | 1 | 2 |
| | 2 | 2 |
| | 4 | 1 |
| Intractable neurological disease | 1 | 2 |
| | 4 | 1 |
| Dementia | 1 | 3 |
| Others | 1 | 7 |
| | 2 | 4 |
| | 3 | 2 |
| | 5 | 3 |
| | 6 | 1 |
| | 8 | 1 |
| | 9 | 1 |
| | 10 | 1 |
| | 12 | 1 |
| | 20 | 2 |
| | 95 | 1 |
| | 380 | 1 |

CHF, chronic heart failure; CRF, chronic renal failure.