

## Incidence of Acute Kidney Injury

The proportion of acute kidney injury cases in patients whose creatinine level was measured once or more among all admitted patients



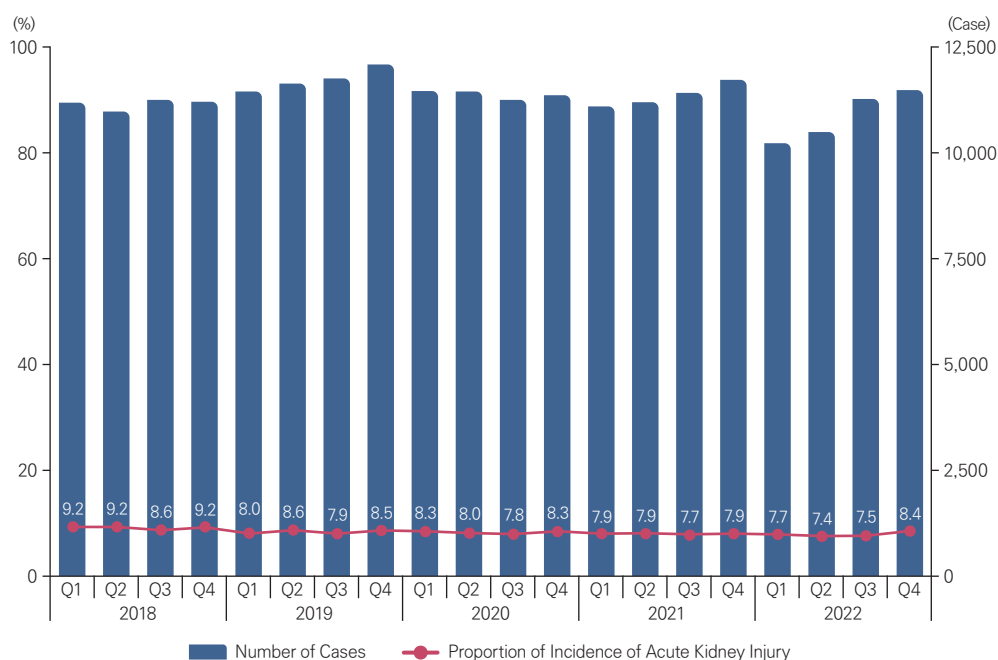
### Definitions

- ◆ **Incidence of acute kidney injury:** It is defined as an increase of creatinine level by 0.3 mg/dL or 1.5× from the baseline level within two weeks after admission.



### Result

January 1, 2018 – December 31, 2022



### Interpretation

- ◆ The assessment and management of the incidence of acute kidney injury is highly important since the condition may lead to increased risks of prolonged length of stay, incidence of complications, and mortality.



### Improvement

- ◆ A quarterly conference for the management of acute kidney injury upon referral from another department or patient discharge.
- ◆ Thorough follow-up monitoring after discharge.

Data source SNUBH EMR (Electronic Medical Record), CDW (Clinical Data Warehouse), Acute Kidney Injury Registry

## Proportion of Severe Acute Kidney Injury

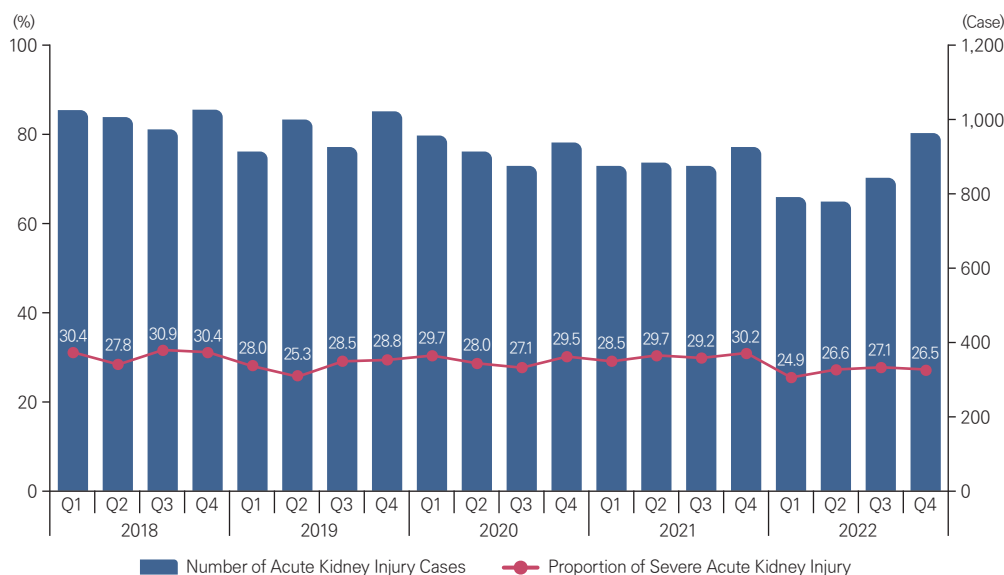
The proportion of stage II or III acute kidney injury among all patients with the condition

### Definitions

- ◆ **Severe acute kidney injury:** Stage II or III acute kidney injury.
  - stage II: A case where post-admission creatinine level has increased  $\geq 2$ – $2.9\times$  compared to the baseline level.
  - stage III: A case where post-admission creatinine level has increased  $\geq 3\times$  or  $4.0\text{mg/dL}$  compared to the baseline level.

### Result

January 1, 2018 – December 31, 2022



### Interpretation

- ◆ Periodic monitoring should be performed and measures should be devised to prevent advancement into severe acute kidney injury since the condition may lead to increased probability of complications, renal replacement therapy, and mortality.

### Improvement

- ◆ A quarterly conference for the treatment of acute kidney injury upon referral from another department or patient discharge.
- ◆ Thorough follow-up monitoring after discharge.

Data source SNUBH EMR (Electronic Medical Record), CDW (Clinical Data Warehouse), Acute Kidney Injury Registry

## Early Referral to the Department of Nephrology and Recovery from Acute Kidney Injury

The proportion of the referral for a rapid treatment by a nephrologist following the incidence of acute kidney injury, and the proportion of cases where the renal function has been restored to the baseline upon discharge



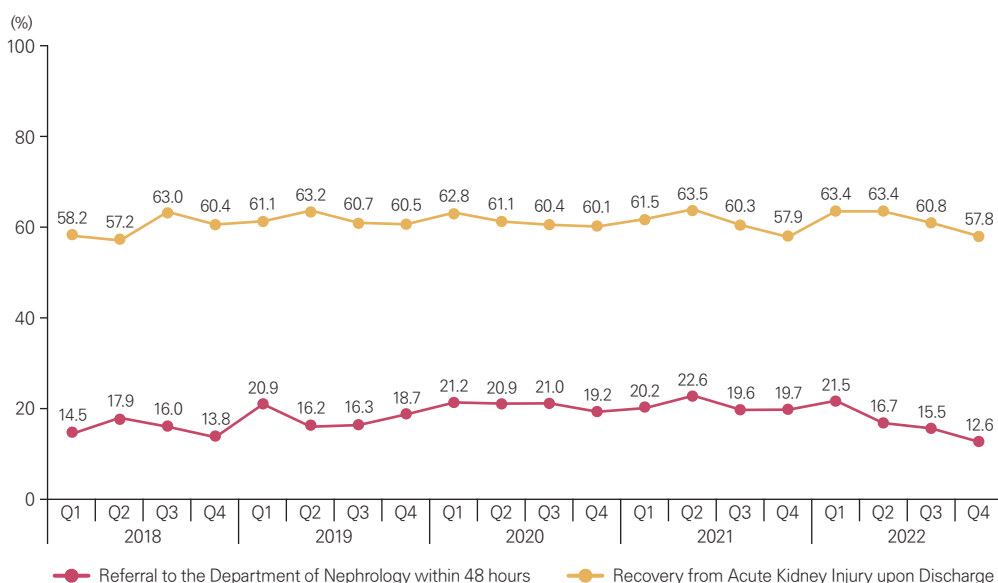
### Definitions

- ◆ **Early referral to the Department of Nephrology:** The proportion of the referral from another department to the Department of Nephrology within 48 hours from the incidence of acute kidney injury.
- ◆ **Recovery from acute kidney injury upon discharge:** A case where the last estimated creatinine level before discharge is  $1.2 \times$  lower than the baseline level.



### Result

January 1, 2018 – December 31, 2022



### Interpretation

- ◆ Based on the clinical evidence that an early referral to the Department of Nephrology is effective for improving the patients' prognosis, the respective indicator was assessed and applied to designing a measure for promotion. For the effectiveness evaluation, the indicator of recovery from acute kidney injury was investigated.



### Improvement

- ◆ A quarterly conference for the treatment of acute kidney injury upon referral from another department or patient discharge.
- ◆ Thorough follow-up monitoring after discharge.

Data source SNUBH EMR (Electronic Medical Record), CDW (Clinical Data Warehouse), Acute Kidney Injury Registry