Method: A retrospective review of electronic records was conducted for patients who underwent formal lower-limb ultrasound for suspected DVT at our hospital over a three-month period (August 1, 2022-October 12, 2022). Patient charts for all ED presentations were assessed to determine whether POCUS was offered and whether DVT was diagnosed.

Statistical analysis was conducted using PRISM v9.

Results: 80 formal ultrasound scans were performed at our hospital for lower limb DVT. 58 were requested for patients presenting to ED, of which 42 had complete records available meeting selection criteria.

POCUS was offered to 24 patients in ED (57.1%). Sensitivity was 66% (95% CI 12%- 98%), and specificity was 94.1% (95% CI 75%-99%). Overall accuracy was 90%, with only one false negative study identified at formal follow-up ultrasound.

Conclusion: Although sample size was small, our results suggest that POCUS is an accurate but underused tool to diagnose lower limb DVT. Developing a standardized protocol for performing and reporting POCUS DVT scans in ED should allow for earlier diagnosis and initiation of appropriate treatment where necessary.

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A Comparative Study of Business Continuity Planning in Long-Term care Settings in the U.S. and Japan Based on Literature Review

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Introduction: Business continuity planning (BCP) ensures that critical healthcare operations are not interrupted and are recovered quickly, in the event of a disaster. BCP has an important role in avoiding adverse health impacts, particularly in long-term care settings. The purpose of this study is to conduct a literature review and comparison of the U.S. and Japanese BCP in long-term care to identify and compare challenges and desirable approaches in each country to support older adults.

Method: We systematically searched PubMed, CINAHL, Japan Medical Abstracts Society and EMBASE databases, gray literature, and conducted a hand search of high-impact journals for studies published between 2000 and 2022 that assessed BCP in the United States and Japan.

Results: From the literature, a challenge identified in the U.S. is the limited coordination within and across regions and between healthcare institutions and long-term care settings. The advantages are that an established structure of planning, training and evaluation is in place, with evidence from recent disasters showing net positive effects. In Japan, a significant challenge is that, despite an emphasis on continuity in the provision of medical care and welfare to individuals, cooperation between BCP at healthcare institutions and BCP at long-term care facilities is underdeveloped. The advantage is that BCP at medical institutions is incorporated into the national healthcare plan in Japan, making it easy to design BCP protocols and plans according to local needs.

Conclusion: Future research should focus on two points. 1) In the U.S., there is a need for evaluation of BCP cooperation and coordination among healthcare networks, especially in long-term care settings. 2) In Japan, it is necessary to promote BCP in healthcare sectors and accumulate training and evaluation across the fields of medical institutions and long-term care facilities.

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Appropriate Imaging Modalities in the Emergency Department for Assessment of Renal Stones

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Introduction: Urolithiasis prevalence is approximately 15-20%, the third most common urological presentation to emergency departments (ED). In the ED, renal stones are usually diagnosed by clinical presentation, but imaging modalities play a role in confirmation and exclusion of hydronephrosis. 85% of stones are calcium oxalate/calcium phosphate, which are radio opaque, and 15% are radiolucent uric acid or cysteine stones. Non-contrast CT scans have 95% and 97% sensitivity and specificity rates, while x-rays have 57% and 76% respectively. In Wexford General Hospital, radiology prefers plain film x-rays prior to CT scans in assessing kidney stones.

Method: The aim of this study was to assess the sensitivity of x-rays in patients undergoing low dose non-contrast CT for kidney stones and to apply this information to clinical practice. A retrospective audit was conducted using NIMIS/PACS from December 1, 2021-March 31,2022. All patients who underwent CT KUBS for evaluation of renal stones were included, and CT KUB findings were compared with initial x-ray findings.

Results: A CT KUB was performed on 56 patients to assess renal stones, and 29 patients had renal stones. Among 29 patients, 21 had x-rays and CT scans performed, and 12 had x-ray findings that indicated renal stones, indicating 57% sensitivity. The study found 36 patients had x-rays for renal stones, but no CT scan was scheduled for 15 patients who might have undiagnosed radiolucent stones.

Conclusion: Radiological imaging plays a central role in the management of suspected renal stones. CT KUB is a useful tool for evaluating patients with radio-opaque kidney stones as well as detecting radiolucent stones and renal pathologies that can be missed with plain radiographs. Low-dose CT KUB is recommended as a first-line investigation for renal stone patients to reduce radiation risks and unnecessary abdominal x-rays while