# FACTORS ASSOCIATED WITH THE FINANCIAL DISTRESS OF HOSPITALS: A SYSTEMATIC REVIEW



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# **INTRODUCTION:**

- Hospitals have been under growing financial strain due to macro-economic factors and changes in healthcare regulations.
- The number of hospitals experiencing financial distress, filing for bankruptcy and closing down have increased.
- 'Financially sick' hospitals contribute to sicker patients.
- Hospital bankruptcy and closure have been shown to result in poorer health outcomes for patients.

### AIMS:

- **Primary aim:**
- To conduct a systematic review on factors associated with hospital financial distress.
- **Secondary aims:**
- Develop a consensus definition for hospital financial distress based on existing literature.
- Consolidate the various measurement approaches for hospital financial distress.

## **METHODOLOGY:**

**Step 1:** Development of review strategy and conduct of article search.

Step 2: Article selection.

**Step 3:** Quality appraisal.

Step 4: Concept analysis to develop consensus definition for hospital financial distress.

**Step 5:** Consolidation and classification of measurement approaches for hospital financial distress.

**Step 6:** Synthesis of factors associated with hospital financial distress using the constant comparative method.

#### **RESULTS: ARTICLE SELECTION** Web of Science **Business Source Premier** OVID Scopus Embase 3210 Titles 3769 Titles 2359 Titles 2307 Titles 550 Titles Total 4388 Duplicates 12195 Titles 7705 Titles Excluded: 7807 Titles Not related to topic Non-English language 65 Abstracts Excluded: Not related to topic 102 Abstracts Newspaper Article 13 Full Texts Excluded: Non-English language Not related to topic 37 Full Texts **Opinion Articles** Non-English language 24 Full Texts

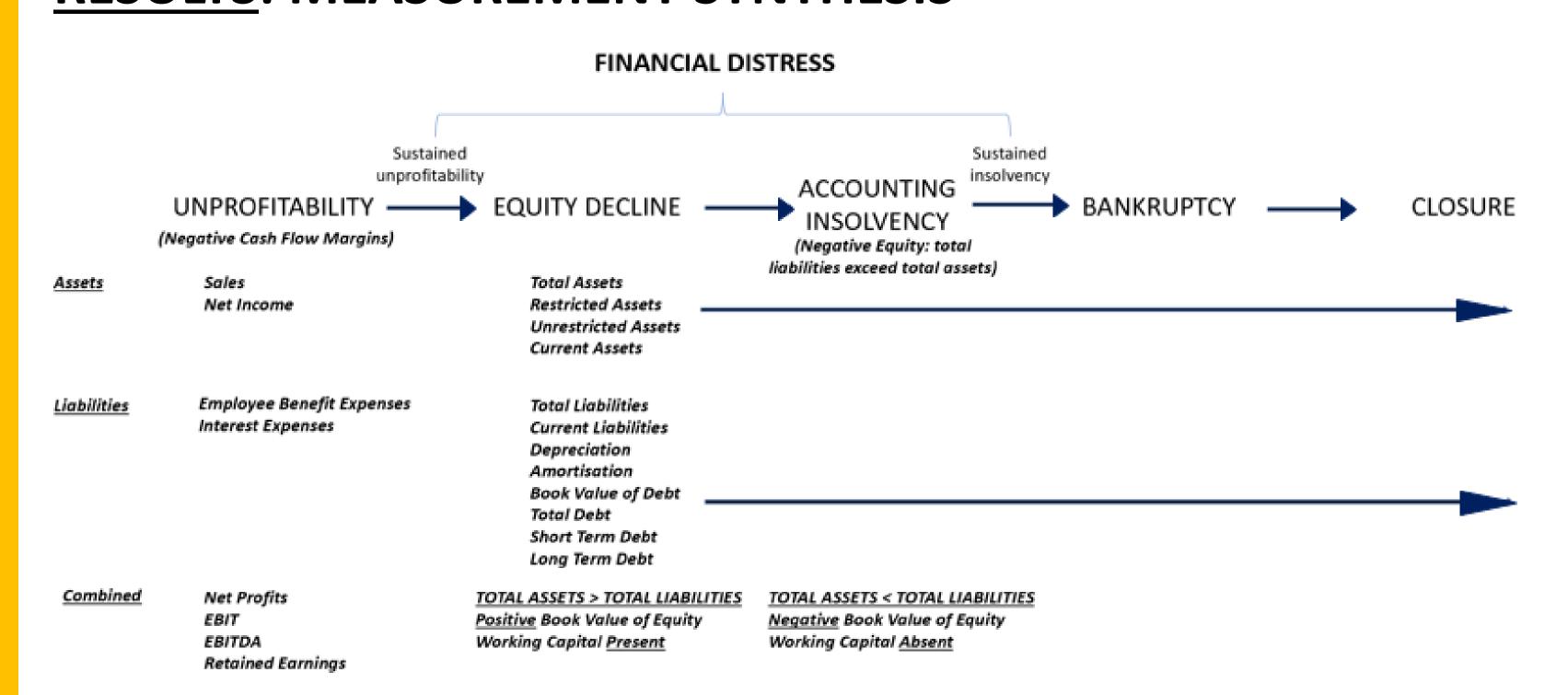
# **RESULTS: CONSENSUS DEFINITION**

| ANTECEDENTS   | ATTRIBUTES   | OUTCOMES   | RELATED CONCEPTS                          |
|---|--|--|---|
| - Unprofitability Negative operating income Negative net income | <ul> <li>Sustained unprofitability</li> <li>Equity decline</li> <li>Decline in credit</li> <li>worthiness</li> <li>Difficulties in debt</li> <li>repayment</li> <li>Inability to fulfil financial</li> <li>obligations to creditors,</li> <li>investors and employees</li> <li>Insolvency</li> </ul> | - Bankruptcy - Hospital closure - Hospital merger - Change in hospital organisational status | - Financial decline<br>- Financial stress |

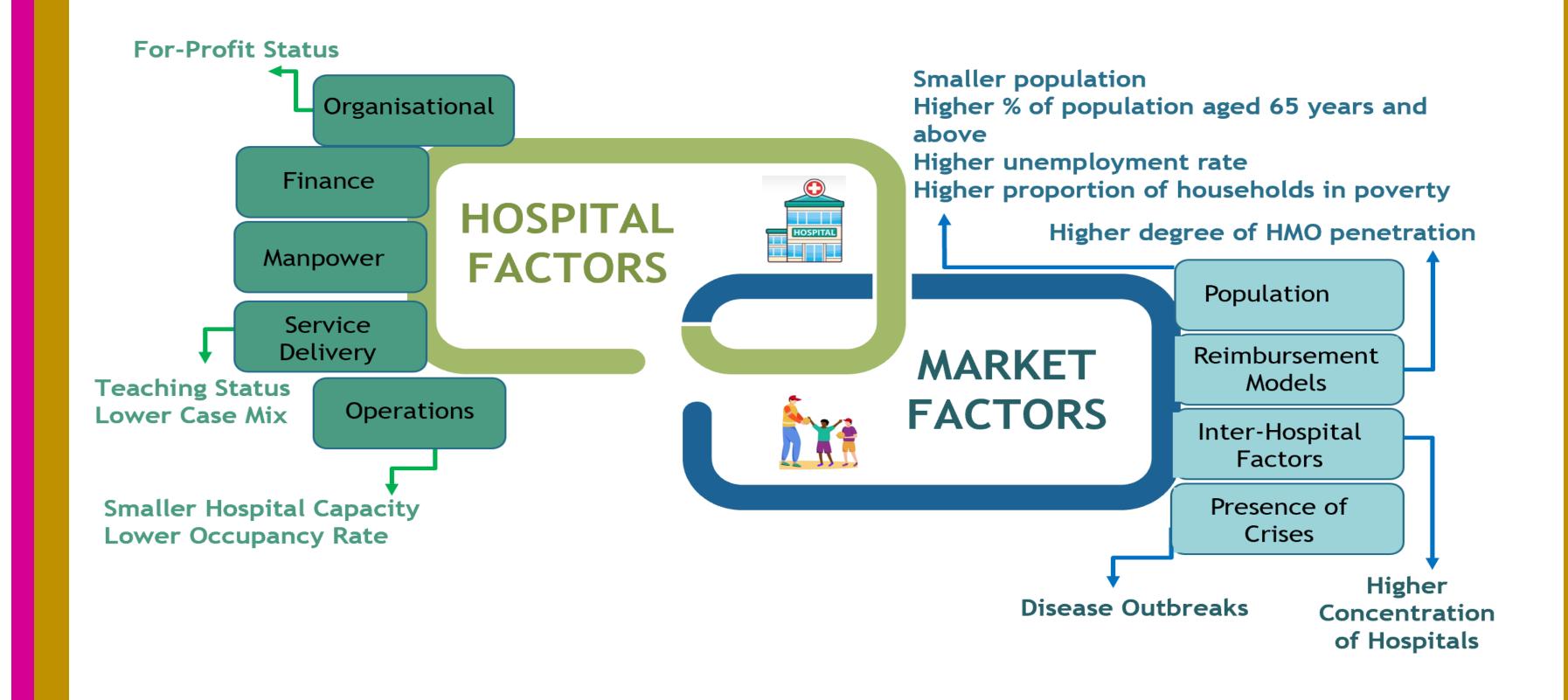
#### **CONSENSUS DEFINITION:**

Hospital financial distress refers to the stage of decline when a hospital is unable to meet its financial obligations. This is observed when the hospital is in a state of sustained unprofitability, equity decline or accounting insolvency.

# **RESULTS: MEASUREMENT SYNTHESIS**



# **RESULTS: FACTORS ANALYSIS**



# **CONCLUSIONS:**

- 1. Novel consensus definition for hospital financial distress: the stage of decline when a hospital is unable to meet its financial obligations. This is when a hospital is in a state of sustained unprofitability, equity decline or accounting insolvency.
- Measurement approaches for hospital financial distress could be broken down into fundamental financial variables, which would be useful to determine the phase of financial distress a hospital was in.
- Factors associated with hospital financial distress could be classified into hospital and market factors.
- Future studies are required in this area of study, especially to evaluate the strengths and limitations of interventions to prevent and manage financially distressed hospitals.

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