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# The Use of Turning and Repositioning Versus Pressure Redistributing Support Surfaces in the Prevention of Pressure Ulcers

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# Pressure Ulcer Prevention: Standard Care Compared to Pressure Redistributing Support Surfaces

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## PATIENT CARE ISSUE

- “An area of localized damage to skin and underlying tissue over a bony prominence, as a result of pressure, or pressure in combination with shear.”<sup>3</sup>
- Pressure ulcers affect approximately 1.3 to 3 million adults in the United States alone<sup>3</sup>
- Annual cost of pressure ulcer management is approximately 11 billion dollars<sup>12</sup>
- Recent research has shown that there are various methods to prevent the occurrence of pressure ulcers.

## REGISTERED NURSE INTERVIEW

- RN Miami Valley Hospital
- Standard Care: All patients have pressure redistributing support surfaces implemented in their care and those who are most at risk for skin breakdown are also turned and repositioned every 2 hours (RN at Miami Valley Hospital, personal communication, Oct. 20, 2014).

## EVIDENCE-BASED PRACTICE QUESTION

In hospitalized critically ill patients, how does turning and repositioning every two to four hours compared to the use of pressure redistributing support surfaces prevent the occurrence of pressure ulcers?

P: Hospitalized critically ill patients  
I: Turning and repositioning q 2-4 hours  
C: Pressure redistributing support surfaces (PRSS)  
O: Prevent the occurrence of pressure ulcers

## SYNTHESIS OF EVIDENCE

- Minimal statistically significant evidence: Turning and repositioning every two to four hours → prevention of pressure ulcers<sup>2, 6, 11</sup>
- Minimal statistically significant evidence: Pressure redistributing support surfaces is effective → prevention of pressure ulcer<sup>3, 4, 5, 11, 12</sup>
- Gap still exists → further research needed<sup>1, 3, 4, 5, 6, 7, 11, 12</sup>
- Turning and repositioning when coupled with pressure redistributing support surfaces → prevention of pressure ulcers<sup>3, 10, 12</sup>

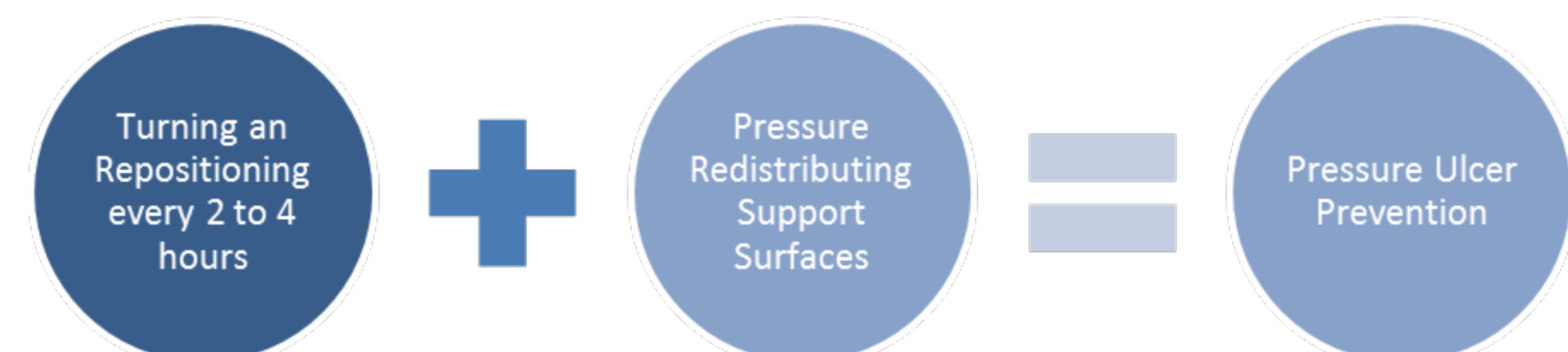
## METHODS

Databases	Keywords	Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> <li>• EBSCOhost</li> <li>• PubMed</li> <li>• OneSearch</li> <li>• UpToDate</li> </ul>	<ul style="list-style-type: none"> <li>• Pressure ulcers</li> <li>• Alternating pressure mattresses</li> <li>• Pressure ulcer prevention</li> <li>• Turning and repositioning</li> </ul>	<ul style="list-style-type: none"> <li>• Hospitalized critically ill patients</li> <li>• Turning and repositioning intervention</li> <li>• Use of a PRSS</li> </ul>	<ul style="list-style-type: none"> <li>• Small sample size</li> <li>• No relevance to specific topic</li> <li>• Over 5 years from current date</li> </ul>

## LIMITATIONS

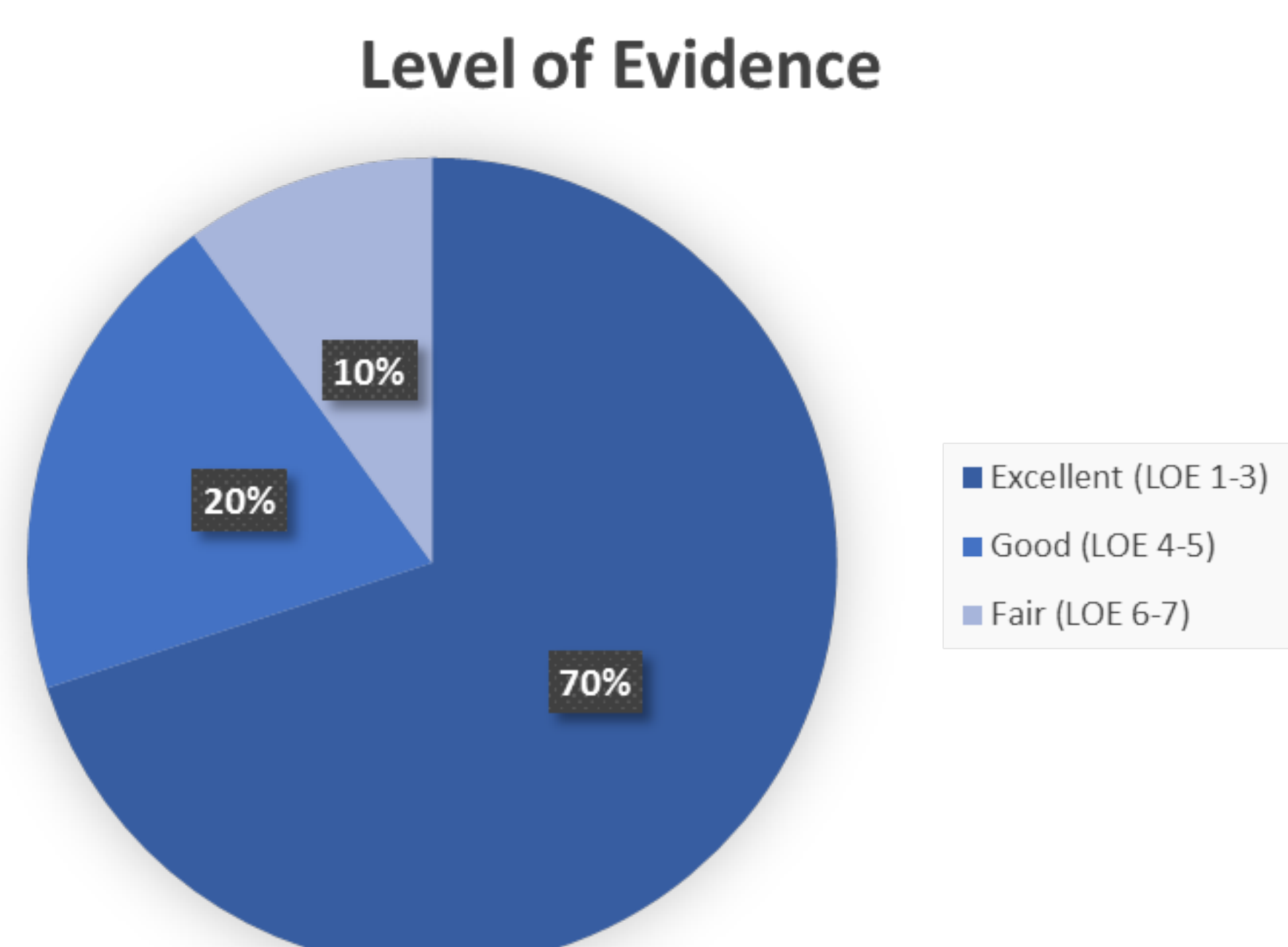
- Only two interventions were explored
- Lack of generalizability<sup>11</sup>

## EVIDENCE-BASED PRACTICE RECOMMENDATIONS



## RESULTS

- n=20: articles originally chosen based on relevance
- n=10: articles excluded based on small sample size, no relevance to specific topic and over 5 years from current date
- n=10: articles remaining and expressly relevant to specific topic



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