Ambulatory Care Shared Governance Pediatric Temperature Taking EBQI Project

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Background

Ambulatory Care Nurses raised questions about the most accurate methods for pediatric temperature taking (e.g., oral, rectal, tympanic, and temporal temperatures): • What is the most accurate route? • Can less invasive routes be used for non-fever related visits? • Is a core (rectal) temperature required for well child visits?

Clinical Question

What is the best route for pediatric temperature taking in an Ambulatory Care setting [by age group] for a well child exam, illness, or injury visit?

Approach

• Iowa Model Revised was used by an Ambulatory Care Shared Governance subcommittee to look into this issue. • Team members reviewed current AAH policies and procedures. • Ambulatory Care RNs and MAs (N=598) completed an electronic survey via Survey Monkey to determine current practices and equipment used for temperature taking. • A literature search was conducted by the AAH librarian and review conducted by a AAH nurse scientist.

Staff Survey Findings (N=598)

<table>
<thead>
<tr>
<th>Patient Group</th>
<th>0 - 3 months</th>
<th>4 - 6 months</th>
<th>7 - 12 months</th>
<th>1 - 2 years</th>
<th>3 - 5 years</th>
<th>&gt; 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Child Visit</td>
<td>Temporal if fever – take rectal*</td>
<td>Temporal</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic Oral</td>
<td>Temporal Tympanic Oral</td>
</tr>
<tr>
<td>Injury Visit, No Fever</td>
<td>Temporal if fever – take rectal*</td>
<td>Temporal</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic Oral</td>
<td>Temporal Tympanic Oral</td>
</tr>
<tr>
<td>Fever Related Visit</td>
<td>Rectal*</td>
<td>Temporal</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic</td>
<td>Temporal Tympanic Oral</td>
<td>Temporal Tympanic Oral</td>
</tr>
</tbody>
</table>

Figure 2. Recommended AAH Temperature Method Based upon Age and Type of Visit.

Conclusions

• Proper technique must be used for all modes to ensure an accurate temperature. • Ideal temperature-measurement technique should be safe, easy, noninvasive, cost effective, and time efficient, and should precisely reflect core body temperature. • A distinction should be made between the need for a core body temperature (rectal) and a screening temperature. • A screening temperature is indicated when illness or fever is not suspected. • An elevation in a screening temperature should be followed by a core temperature. • Core temperatures are necessary when a child is presenting with a fever or a fever is suspected.

Review of Policies & the Evidence

• Lippincott® procedures did not include route recommendations based upon age or reason for visit. • A literature search revealed 16 articles for review. • The literature review indicated rectal temperatures take time, can be inaccurate, may cause injury and are distressing to parents and children. • The American Academy of Pediatrics4 and Society of Pediatric Nurses5 indicate the temporal route is reliable for screening <3 months and recommend a core body temperature (rectal) for infants <3 months. • Screening temperatures are indicated when a core temperature is not required.6 • The recommendations do not require a core body temperature for well child visits or injury with no suspected fever visits.4,5 • Not all routes are equal to measure core body temperature. Temporal and tympanic routes are comparable.7 Majority of staff use route based upon presentation. • The least reliable method is the axillary route.8 • Not all clinics have the equipment required for temporal and tympanic temperature taking (survey finding). • Not all team members were trained in the proper use of all routes (survey finding).

References

5. Society of Pediatric Nurses. (2008, revised 2016) . SPN position statement: Temperature measurement [Online]. Accessed September 20, 2018 at: http://www.pediatricnurses.org/pbin/pdf?5&kid=28&sid=1574&level=VII • Screening temperatures are indicated when a core temperature is not required.6 • Not all routes are equal to measure core body temperature. Temporal and tympanic routes are comparable.7 Majority of staff use route based upon presentation. • The least reliable method is the axillary route.8

Implications for Practice

These recommendations are pending system pediatric policy review.

Acknowledgements

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