**Malnutrition Knowledge, Attitudes and perceived Practices (M-KAP)**

This malnutrition knowledge, attitudes and practices (M-KAP) questionnaire is an important way to determine the knowledge and perceptions of hospital staff, and compare change over time with respect to patient malnutrition and nutrition care. These questions are based on the activities of the Integrated Nutrition Pathway for Acute Care (INPAC). This questionnaire can easily be placed on an online survey program or completed as a traditional ‘paper and pencil’ hardcopy questionnaire. Please acknowledge the original source and copyright in any publications/presentations.

This document includes 3 sections:

1. **Base M-KAP:** To be used to identify current knowledge, attitudes and practices of staff. Completion of M-KAP is useful before starting a quality improvement initiative targeted to nutrition care. Responses can be used to direct change management efforts and areas to focus on when training hospital staff.

2. **Additional questions after an improvement initiative:** If you have embarked on a change management or quality improvement initiative that has involved staff, the M-KAP can be used to identify changes in knowledge, attitudes and practices. In addition to M-KAP, some questions on change efforts may also be useful. These additional questions were used in the More-2-Eat study where INPAC was implemented and M-KAP was used.

3. **Scoring:** The scoring system for each question is provided. You will be able to use individual question scores and change between scores, as well as total knowledge/attitude (KA score), practice score, and total M-KAP score.

Detail about this questionnaire has been published. In these publications you can also compare your hospital score to the total for the 5 More-2-Eat hospitals.


M-KAP
Malnutrition Knowledge, Attitude and Perceived Practices questionnaire.

Thank you for taking the time to complete this questionnaire. It should only take a few minutes of your time. Please complete the following questions to the best of your ability.

About You

1. Which type of hospital unit(s) do you primarily work in? *(Please check all that apply)*
   - Medical
   - Surgical
   - Critical Care
   - All other, please identify ____

2. You are a(n):
   - Diet Tech
   - Registered Nurse
   - Registered Practical Nurse/Licensed Practical Nurse
   - Nurse Practitioner/Clinical Nurse Specialist
   - Health Care Aide/Personal Support Worker
   - Attending Physician
   - Resident
   - Fellow
   - Physiotherapist/Occupational Therapist
   - Speech-Language Pathologist
   - Other, please identify____

3. You are an employee of:
   - The hospital
   - A nursing agency
   - Other, please identify____

4. Are you:
   - Full time
   - Part time
   - Casual
   - Other, please identify____

5. How many years you have been practicing:
   (TIP: This is overall, not just in your current hospital.)
   - < 2 years
   - 2-5 years
   - 6-10 years
   - 11-20 years
   - 21-30 years
   - 31+ years

6. Which age group do you fall into?
   - < 30 years
   - 30-39 years
   - 40-49 years
   - 50-59 years
   - 60+ years

7. What is your self-identified gender?
   - Male
   - Female
   - Other
<table>
<thead>
<tr>
<th>Please rate your agreement with each of the following statements</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nutrition is not important to a patient’s recovery in hospital*</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2. All patients should be screened for malnutrition at admission to hospital</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>3. A patient’s weight should be taken at admission</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>4. All staff involved in patient care can help set up the meal tray, open packages etc.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>5. All staff involved in patient care can provide hands-on assistance to eat when necessary</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>6. Malnutrition is a high priority at this hospital</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>7. Giving malnourished patients an adequate amount of food will enhance their recovery</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>8. All malnourished patients require individualized treatment by a dietitian *</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>9. I have an important role in promoting a patient’s food intake</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>10. Monitoring food intake is a good way to determine a patient’s nutritional status</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<td>Strongly Agree</td>
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<tr>
<td>11. Interruptions during the meal can negatively affect patient food intake</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>12. Promoting food intake to a patient is every staff member’s job</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>13. Nutritional care of a patient is only the role of the dietitian*</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>14. Malnourished patients who are discharged need follow up in the community</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>15. A patient’s weight is not necessary at discharge*</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
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<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>16. I always know when to refer to a dietitian</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>17. I know how to refer to a dietitian</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>18. I know when a patient is at risk of malnutrition or is malnourished</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>19. I know some strategies to support food intake at meals</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>20. I need more training to better support the nutrition needs of my patients</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Please rate how often you DO the following</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
<td>N/A</td>
</tr>
<tr>
<td>------------------------------------------</td>
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</tr>
<tr>
<td>1. Check the patient has all that they need to eat (e.g. dentures, glasses)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Help a patient with opening food packages</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Assist a patient to eat if they need help</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. If permitted, encourage a patient’s family to bring food from home for the patient</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Visit and check a patient during their meal time to see how well they are eating</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Realign my tasks so I do not interrupt a patient during their meal time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. At discharge of a malnourished patient, provide the patient or family with nutrition education material</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

Thank you for taking the time to complete this questionnaire.
Additional M-KAP Questions

These questions are to include along with baseline questions, AFTER you have worked towards improving nutrition care activities.

1. Have you noticed any change in nutrition care practice (packages opened for patients, provision of eating assistance, fewer mealtime interruptions etc.) since [date]?

☐ Yes – positive changes noticed
☐ Yes – negative changes noticed
☐ Both positive and negative changes noticed
☐ No - no change noticed

If you noticed a change, what have you noticed: [text box]

2. On a scale of 1 (negative/decreased) to 10 (positive/increased), rank the impact of the changes you noticed on...

   a) Patients’ overall health and recovery
   1  2  3  4  5  6  7  8  9  10  No change
   1 = Negative effect
   5 = Neutral/did not influence
   10 = Positive effect

   b) Your job satisfaction
   1  2  3  4  5  6  7  8  9  10  No change
   1 = Decreased satisfaction
   5 = Neutral/did not influence
   10 = Increased satisfaction

   c) Overall value to the unit
   1  2  3  4  5  6  7  8  9  10  No change
   1 = Negative effect
   5 = Neutral/did not influence
   10 = Positive effect
3. On a scale of 1 (lower) to 10 (higher), rate the focus of this unit on nutrition care as compared to [date]?

1 2 3 4 5 6 7 8 9 10

1 = A lot less focused on nutrition care
5 = No change
10 = A lot more focused on nutrition care

4. On a scale of 1 (low/poor) to 10 (high), rate how supported you felt to make changes to nutrition care since [date]?

1 2 3 4 5 6 7 8 9 10

1 = Less supported
5 = No change in level of support
10 = More supported

5. What proportion of patients at your hospital are:

<table>
<thead>
<tr>
<th>None</th>
<th>Less than 10% of patients</th>
<th>11-49% of patients</th>
<th>50-74% of patients</th>
<th>75-100% of patients</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

1. Screened for nutrition risk?

2. Referred to a dietitian if they are thought to be at nutrition risk

3. Received appropriate nutrition care following identification of nutrition risk

6. Please rate your agreement with each of the following statements

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. I was aware that changes were occurring regarding nutrition care on the study unit

2. I was asked what changes to nutrition care I wanted to see on the unit
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. I was involved in planning and making changes to nutrition care on the unit</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
M-KAP Scoring

Knowledge/Attitude Score

For the questions: Please rate your agreement with each of the following statements:

Strongly Disagree = 1
Somewhat Disagree = 2
Neutral = 3
Somewhat Agree = 4
Strongly Agree = 5

NOTE: The * questions are to be reverse coded (Strongly Disagree = 5, Somewhat Disagree = 4, Neutral = 3, Somewhat Agree = 2, Strongly Agree = 1).

KA Total: Add the scores for questions 1-20 to get the total Knowledge/Attitude score.

Practice Scores

For the questions: Please rate how often you DO the following:

Never = 1
Sometimes = 2
Often = 3
Always = 4
N/A = 1
Blank = 1

P Total: Add the scores for questions 20-27 to get the total Practice score.

M-KAP Total: Add KA Total + P Total

Ranking Questions

Ranking impact of change: Select what you qualify as “high” and “low” scores. For More-2-Eat, a score of 7 or above was considered a high/positive.