

Medication Use Evaluation Template

Medication Name: Generic/Brand

P&T Date

Objective and Tips:

Per the ASHP Guidelines on Medication-Use Evaluation¹, the following are common MUE objectives:

1. Promoting optimal medication therapy
2. Improve patient safety
3. Standardize processes/dispensing/administration to reduce unnecessary variation
4. Optimize drug therapy (i.e., monitoring, dispensing, prescribing)
5. Assess value of innovative practices
6. Meet quality or regulatory standards
7. Minimize costs

Medications or use processes that are appropriate for MUE:

1. High risk
2. High volume
3. High cost
4. Those with changes to guidelines (pre/post-guideline updates)
5. Those with established guidelines
6. Those for which internal or external quality standards exist
7. Medications on shortage or backorder

Formulate the MUE Design

1. Prospective vs. Retrospective
2. Inpatient vs. Outpatient

Background and Rationale:

1. What is this medication (MOA, high-risk, high-cost, etc.)?
2. Cost for hospital and/or patient?
3. Why is this medication being evaluated now?
4. Are there previous MUEs related to this topic/medication that have been completed at your institution?

MUE Criteria for Evaluation:

Potential criteria:

1. Safety
 - a. Monitoring
 - b. Contraindications
 - c. Adverse events
 - d. Drug interactions
 - e. PK/PD Considerations
2. Appropriateness
 - a. Indication
 - b. Dosage/Dosage Adjustments
 - c. Duration
3. Process
 - a. Timeliness
 - b. Efficiency
4. What is in the package insert for monitoring/dosing/age cutoffs, etc.?
5. What do guidelines recommend?
6. What are institutional protocols?

Design/Methods:

1. Where was data collected from?
2. What data was collected?
3. What was the timeframe for data collection?
4. Number of patients?
5. Inclusion criteria?
6. Exclusion criteria?

Results:

1. How many patient charts were reviewed? How many patients were included?
2. What are measures of efficacy, safety, tolerability?
3. Was monitoring appropriate?
4. Patient demographics table
5. Appropriateness of medication use based on criteria (lab values, patient parameters, protocols, guidelines, etc.) – can use pie charts and graphs as needed
 - a. Detail what was considered “appropriate” vs “inappropriate” use

Conclusions:

1. How many patients deviated from normal or pre-specified medication use?
2. Are there any outliers?
3. What is the cost-savings or cost?
4. Future direction (for future MUE)?

Limitations:

1. Sample size?
2. Missing data?
3. No data available?
4. Selection bias?

Recommendations:

1. Should institutional protocols change?
2. Should institutional protocols be created?
3. Is there a recommendation that can go to the P&T Committee?
4. Are educational efforts needed?
5. Should limitations on prescribing be instituted?
6. Should the medication be removed from formulary?
7. Should a new medication within the same class be added to formulary for cost-benefit?

Additional Resources:

1. American Society of Health-Systems Pharmacists. [ASHP guidelines on medication-use evaluation](#). Am J Health-Syst Pharm. 2021; 78:168–175.
2. [ASHP Foundation Medication-Use Evaluation Resource Guide: Andexanet Alfa in the Management of Life-Threatening Bleeds in Patients on Direct Factor Xa-Inhibitors](#)

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