The VALUE Framework*  
A Framework for Residents to Assess Value from a Medical Intervention for their Patients

<table>
<thead>
<tr>
<th>The VALUE Framework</th>
<th>Description</th>
<th>Case Examples</th>
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</table>
| Validation & Variability             | - The initial step for a resident to evaluate whether a medical intervention will provide value for a patient is to determine if it has been validated through evidence-based medicine from rigorous research trials or if it has been used despite weaker evidence.  
- Understanding variability is of utmost importance when attempting to apply the outcomes of population-based research to individual patients. Certain medications may be very effective in a specific cohort, but individual differences in age, ethnicity, comorbidities or behavior can greatly affect the benefits of an intervention. It is also important to recognize the variability of diagnostic tests, interventions and outcome measures. | - Pick one patient a week that is considering a medical intervention and compare at least two published studies regarding the validation of study measures and the variability of their application across study populations. Residents then discuss with the group how their findings relate to the patient |
| Affordability & Access               | - Evaluating whether a medical intervention is affordable for a patient is important for two reasons: First, patients are more likely to adhere to interventions that are less expensive, such as when generic medications are compared to brand names. Second, no care translates into no value for the patient.  
- Teaching residents how to best identify resources or alternative treatments can lead to improved value for patients—including in situations when not intervening may provide the most value of all.  
- Limited access to medical care can create barriers to maximizing value from a medical intervention. Residents who can better identify practice settings or patient populations at risk for limited access to care have been found to be better prepared to provide appropriate counseling to patients. | - Ask each patient how they pay for their medical care and medications. Ask uninsured patients how they are finding opportunities to seek medical attention when needed. Ask all patients who express concerns about affordability and access if they are willing to meet with a social worker to understand options for support |
| Long-Term and Less side Effects      | - When evaluating a patient, residents should remember to consider the long-term horizon to recognize medical interventions that might lead to lasting benefits.  
- Side effects from interventions such as medications can impact adherence and sometimes worsen a patient’s quality of life. Side effects differ from adverse events in that they are known and predicted consequences of medication or intervention. Side effects are often known at time of medical decision making and should play a role in determining which intervention has a lower likelihood of side effects and might provide more value. | - When discussing care options with patients in the outpatient setting, always discuss short-term and long-term effects of an intervention, including side effects. Discuss continuing current management without intervention as an option |
| Utility and Usability                | - The balance between utility and usability is important when considering whether an intervention will provide value. Medical utility refers to the desirability of a health outcome. Usability refers to the patient’s willingness and ability to adhere to the intervention. | - Regularly ask patients about their recent and past health status to better understand trends over time. When evaluating an intervention discuss the usability (e.g. ease of use, frequency, affect on patient’s daily living) and the impact on a patient’s utility (e.g. potential to improve their health status). |
| Effectiveness and Errors             | - Interventions that work within controlled settings are defined as efficacious. However, efficacy does not always translate into similar effective outcomes in real-world settings.  
- When reviewing published studies on medical interventions, one must carefully evaluate whether the outcomes were shown to be effective and apply to the patient since many differences between efficacy and effectiveness are due to variations in patient populations or differences in settings. | - Utilize evidence-based clinical guidelines (e.g. USPTF) when evaluating the effectiveness of screening tests. Health systems can also encourage residents to report errors and be involved in quality improvement initiatives |

*Adapted from Patel MS, Davis MM, Lypson ML. The VALUE Framework: Training Residents to Provide Value-Based Care for their Patients. Journal of General Internal Medicine. 2012;27(9):1210-1214.

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