However, when related to the range of normal measurements (information), the patient is seen in the context of someone who is elderly with a temperature and tachycardia. In the greater context of healthcare (metadata), the combination of findings is viewed as life threatening. A clinician who has seen this pattern of patient presentation in the past diagnoses the patient as having the flu (knowledge). In addition, given the patient's age and condition, the clinician determines (understanding) that the patient should be admitted to the hospital and treated for the flu.

Taking an example from a sales agent working for a life insurance company, the knowledge hierarchy associated with a potential customer of a life insurance policy could read as:

- *Data.* Marital status: Single; Annual Income: $32,000; Age: 25.
- *Information.* Death risk is greater for single males than married males; median income is an annual income greater than $19,000; and "young adult" applies to age less than 25.
- *Metadata.* The prospect represents a moderate to low risk.
- *Knowledge.* Given that the prospect has no dependents, insurance has no value to him unless the policy can be used as an investment vehicle.
- *Instrumental understanding.* The prospect should be sold a $100,000 cash value life insurance policy.

In both examples, more than simply grouping data or information is involved in moving up the hierarchy. Rather, there are rules of thumb or heuristics that provide contextual information. In the case of life insurance, the heuristics for risk assignment might be:

- *Low risk.* Age less than 28, marital status single or married.
- *Moderate risk.* Age 28 to 54, marital status married.
- *High risk.* Age 55 or greater, marital status single or married.