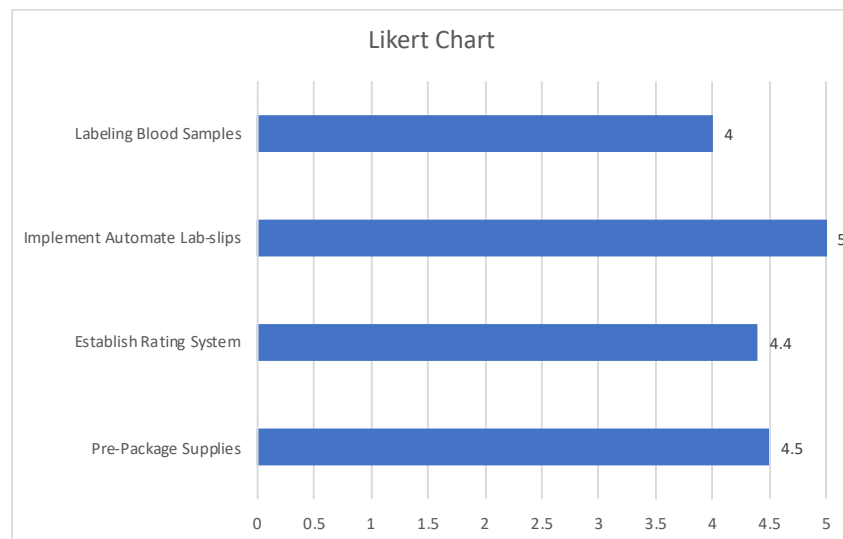


## Improving Blood Lab Pick-Up and Drop-Off

The Johns Hopkins Home Care Group (JHHCG) offers home delivery of medicine to its patients as well as in-home Specialty Infusion Services in greater DelMarVa and part of Pennsylvania. As part of its requirement for service, JHHCG takes a routine blood sample to conduct different medical tests for patients. However, this process had been inefficient in part due to increasing home care demand, disorganized supply packages, and lab issues. A group of students from Whiting School's Master of Engineering Management (MSEM) program was invited to help resolve the issue.

Through eight weeks of intensive investigation, the student consultants narrowed down the scope of the problem, and the root causes of the issues were identified. To resolve the pain points discovered, the student consultants proposed four recommendations to improve existing procedures.

- Pre-package supplies to ensure timeliness in patient service delivery. To implement this recommendation, the distribution team (PQIV) or home health nurses should prepare supplies accordingly.
- Implement a workflow system that can interact with Epic to retrieve a given patient's information from the database so as to generate a pre-filled lab requisition form, thereby reducing the time required to fill out necessary lab forms,
- Establish an internal rating system for nurses to rate each individual lab on friendliness and awareness of nurses' time. By collecting information through such a rating system, more efficient decision making about which lab to use could be affected.
- Label blood samples as "PRIORITY" or "TO BE SPUN BY: time-stamp" to decrease the number processed late.



To evaluate the effectiveness of these proposed recommendations, the student consultants generated a Likert chart for the JHHCG. Nurses rated their level of agreement with the

proposed recommendations from 1 to 5, where 1 means strongly disagree and 5 means strongly agree. As shown on the figure, all of the recommendations were valued 4 or more.