

Velacur as a tool to identify patients with potentially treatable disease at point-of-care

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CONCLUSIONS

- Velacur is a useful tool to assess MASLD, MASH and treatment eligibility.
- As a cloud connected tool, there is great promise to collect and use this data to identify patients and allow them better access to care.
- Even in the highest BMI categories, Velacur was successful in the vast majority of patients.

BACKGROUND

With the increasing prevalence of MASLD and MASH, and available new therapies, tools are needed to locate and identify candidates for treatment. As a cloud connected liver assessment tool, Velacur could provide insights into identifying eligible patients and connecting them to care¹. This study examines Velacur exams from Sept 2023 to Sept 2025 to assess the overall prevalence of MASLD and MASH, and treatment eligible patients. Additionally, as many patients have a high BMI, the overall quality and exam success rates (i.e., a valid scan) of different BMI categories were examined.

METHODS

The results of anonymous exams were collected from Velacur systems connected to the cloud. The median S-WAVE, ACE, VDFF (where available), scan quality and patient BMI (where available) were used in the analysis. The first week of exams after installation were excluded to avoid learning curve effects. The prevalence of MASLD (>234 dB/m or), probable MASH (>5.4 kPa and >234 dB/m), and probable MASH with F2/F3 fibrosis (6-7.4 kPa and >234 dB/m), who would be currently eligible for treatment, were calculated².

In patients where BMI was available, patients were grouped by category (Table 2). The mean scan quality and the overall success rate (% of scans >60% quality) were calculated. The quality of scans is assessed by an objective shear wave metric within the Velacur software³.

RESULTS

Table 1: Summary of Patient Characteristics

Characteristic	Results
MASLD (% of patients)	62.3%
MASH (% of patient)	21.4%
Eligible for MASH treatment (% of patients)	10.2%
BMI (kg/m ²), where available	31.1 ± 6.3

A total of 91 US-based clinics and 26,141 exams were included in the analysis.

The prevalence of disease is shown in Table 1, with about 10% of exams representing potentially treatable patients.

When examining the quality and success of exams by BMI, 18,826 exams were included. The distribution of BMI by category is shown in Table 2 and Figure 1. Even patients with a BMI >45 kg/m² were successful >75% of the time, and more than 90% of patients <40 kg/m² were successful as measured by the objective quality metric³.

One limitation is that these exams could include practice, or additional training exams performed for new operators. Typical training includes 2 half days hands-on training and up to 2 weeks of remote monitoring. Although the first week after training was excluded, new operators typically reach proficiency after 25 scans.

Table 2: Summary of BMI categories and quality metrics

BMI (kg/m ²)	Number of patients (%)	Percentage of Successful exams	Median (IQR) of Exam Quality
<25	2934 (15.5%)	98.9	94.6 (12.8)
25-30	5947 (31.6%)	97.1	92.1 (16.2)
30-35	5432 (28.8%)	95.0	88.0 (20.3)
35-40	2958 (15.7%)	91.3	82.8 (25.6)
40-45	1104 (5.8%)	85.9	76.8 (30.5)
45+	451 (2.4%)	76.2	67.5 (39.6)

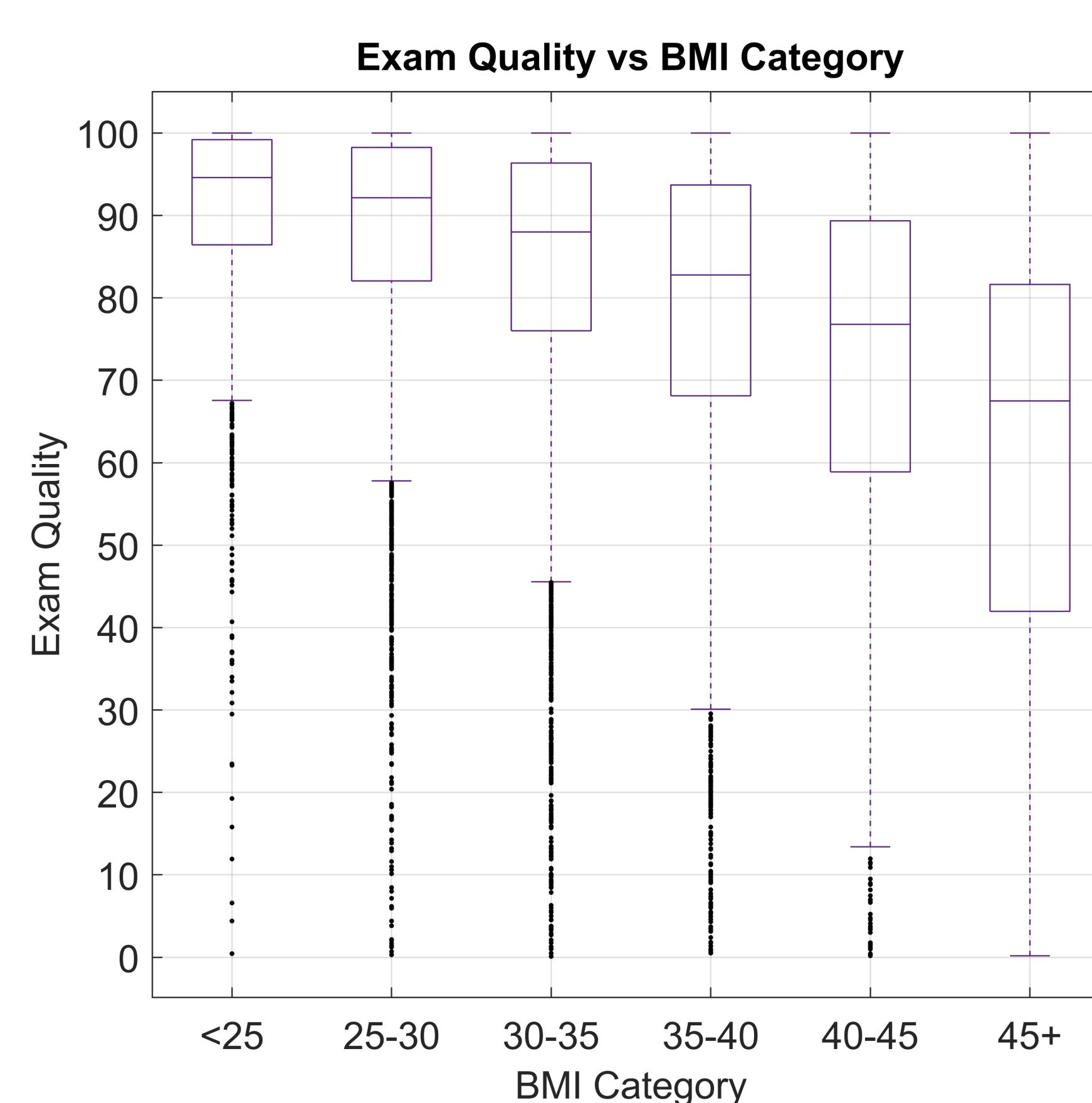
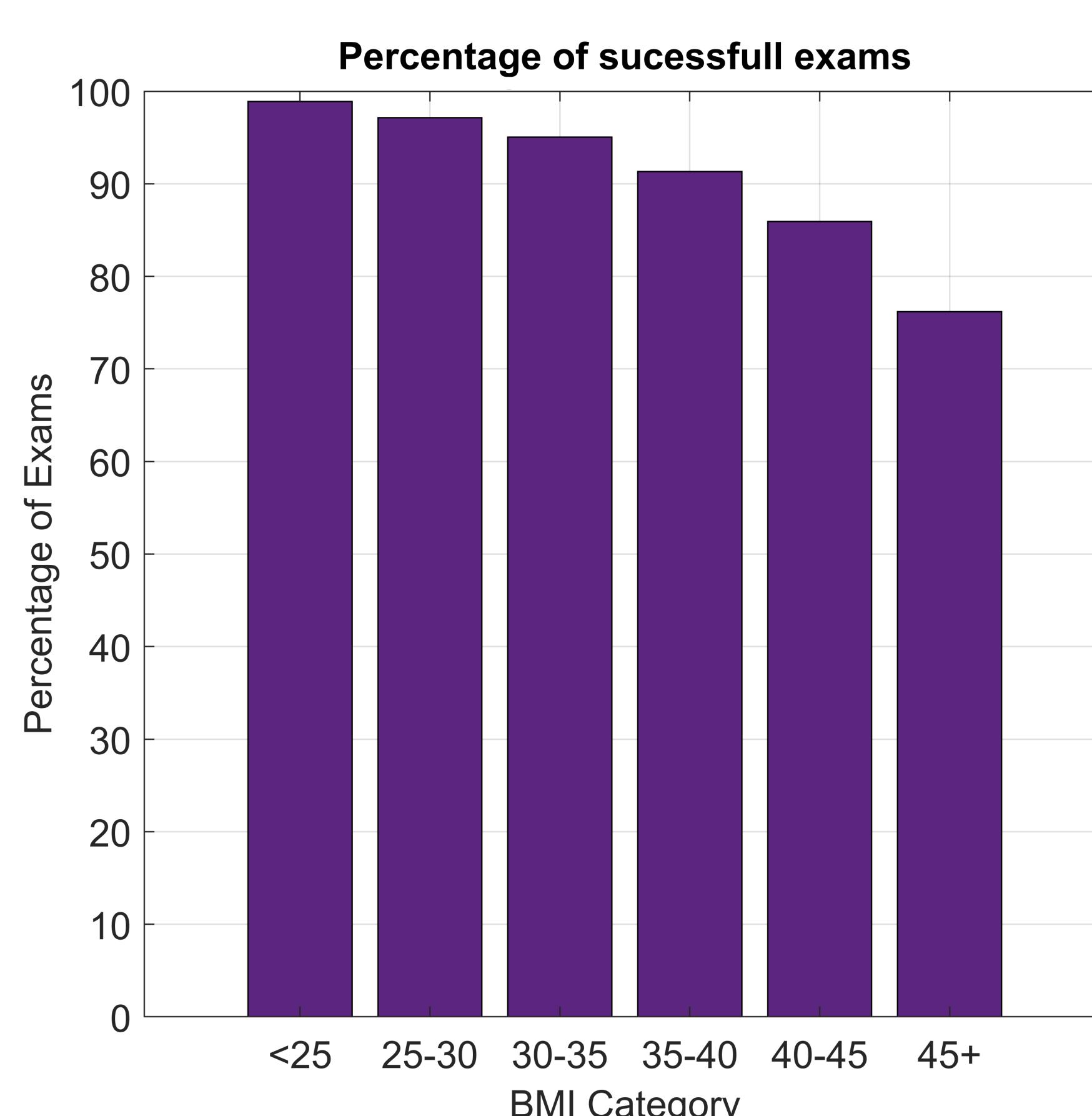
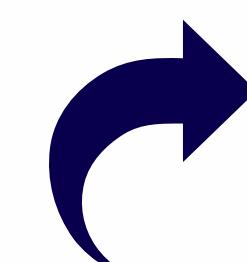


Figure 1: Left: Percentage of successful scans according to BMI category. Right: Overall exam quality assessed by the wave quality metric³.

WANT TO KNOW MORE?

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¹ Loomba, Rohit, et al. "Velacur ACE outperforms FibroScan CAP for diagnosis of MASLD." *Hepatology Communications* 8.4 (2024): e0402.

² Chen, Vincent L., et al. "Resmetirom therapy for metabolic dysfunction-associated steatotic liver disease: October 2024 updates to AASLD Practice Guidance." *Hepatology* 81.1 (2025): 312-320.

³ Honarvar, Mohammad, et al. "Deep learning based shear wave detection and segmentation tool for use in point-of-care for chronic liver disease assessments." *Ultrasound in Medicine & Biology* 50.12 (2024): 1812-1820.