

# MASLD/MASH in Japan: A liver disease country profile

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This profile offers an overview of the current policy landscape of metabolic dysfunction-associated steatotic liver disease (MASLD) and metabolic dysfunction-associated steatohepatitis (MASH) in Japan. MASLD comprises a spectrum of chronic liver disease ranging from simple fat deposits to scarring of the liver (fibrosis), which can result in cirrhosis and liver cancer. The information in this profile was taken from secondary sources. Economist Impact bears sole responsibility for all content.



#### 3 in 10 people in Japan have MASLD<sup>1</sup>

Approximately 30% of Japanese adults (aged 30 years and above) have MASLD and 3-5% of the Japanese population (all ages) have MASH—the most severe form of the disease.<sup>1,2</sup> MASH cases are projected to rise from 3.7m in 2016 to 4.3m (16% increase) in 2030.<sup>3</sup>

The economic burden of MASLD and MASH in Japan is substantial, due to the high disease burden related to type 2 diabetes and obesity.<sup>4</sup> Direct healthcare costs of MASH were US\$1.27bn with productivity losses reaching US\$14.57bn in 2021 and expected to rise to 2bn and 21.56bn respectively by 2030.<sup>5</sup>

Japan's liver disease policy focuses primarily on the prevention and treatment of viral hepatitis. MASLD/MASH prevalence makes a clear case for an integrated approach that leverages the association with other NCDs. Through joint efforts, policy makers can take steps to help prevent, diagnose and treat this condition, reducing its extensive health and economic impacts.

### Areas of focus for policy makers in Japan consist of:

- Using existing annual health check-ups to identify people at risk of MASLD/MASH;
- Raising public awareness of the disease;
- Establishing integrated care for the management of NCDs including MASLD/MASH and expanding the annual health survey to include MASLD/MASH for a more comprehensive understanding of its costs and burden.

**MASH** 

\$14bn

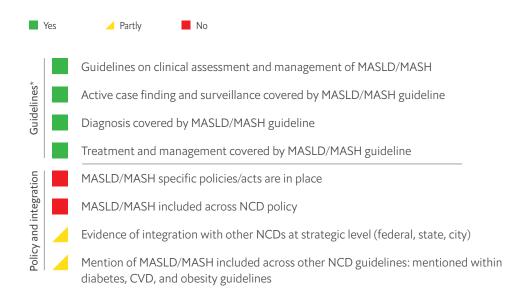
productivity



#### **Current snapshot**

### MASLD/MASH guidelines, policy and integration in Japan <sup>26-8</sup>

Our research across the points below looked at whether policies/guidelines are in place. It is important to note that having policies/guidelines in place does not necessarily lead to their implementation



Source: Economist Impact

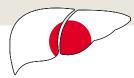
\*Guideline implementation status is unknown

# Key policy takeaways and opportunities for MASLD/MASH care and prevention

1. Use annual health check-ups to identify people at risk of MASLD/MASH to improve early detection and prevention. In Japan, people aged 40-74 can access annual health check-ups through their national health insurance.9 These check-ups are in part designed to identify people at high risk of various metabolic conditions, enabling early detection, diagnosis and management. MASLD is a reversible condition during its early stages, and the medical costs and societal impacts of MASH increase with disease severity, complications and comorbidities, emphasising the need for early detection and action to prevent or delay its progression.<sup>10</sup> The clinical and cost benefits of early detection strategies have been shown in other NCDs such as chronic kidney disease,

cancer and cardiovascular disease. 11-14 Annual health check-ups could be used to identify people at risk of MASLD/MASH for targeted screening, as is done for other conditions in Japan.

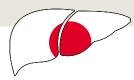




2. Raise public awareness and understanding of MASLD/MASH. Public awareness of MASLD/ MASH is low. In 2022/23 the Ministry of Health, Labour and Welfare found that only 26.5% of patients diagnosed with metabolic syndrome (including MASLD/MASH) completed a followup programme designed to support lifestyle modifications.9 A lack of understanding of the broad health implications of metabolic disease may be a contributing factor.9 When it comes to designing an awareness-raising approach, a collaborative, multi-stakeholder effort that taps into connections between MASLD/MASH and other NCDs is likely to be more effective than a broad awareness raising campaign for MASLD/ MASH alone. Such action could ensure that annual health checks are fully leveraged as an opportunity to enhance MASLD/MASH detection and management.

Seeking to extend the healthy life expectancy of its own employees and the general public, the health ministry has launched the "Smart Life Project", which engages nearly 11,000 private organisations in health promotion activities such as smoking cessation and physical exercise. 15 Given the direct health impacts of MASLD/ MASH and its interaction with other NCDs, the health ministry could consider incorporating MASLD/MASH into the project. The Japanese Societies of Gastroenterology and Hepatology produced a patient-friendly version of their 2023 MASLD/MASH clinical guidelines to support public education of those who have been diagnosed with the condition.<sup>16</sup> Producing patient-friendly guidance that includes MASLD/ MASH in areas such as obesity and NCDs could educate the public on the interactions between different NCDs, the common risk factors and the broad impact of lifestyle modifications.<sup>7</sup> To add, World Liver Day, launched by the Healthy Livers, Healthy Lives coalition, which is observed annually on April 19th, could be used by liver societies or broader public health organisations in the country to raise awareness about MASLD/MASH.

**The Smart Life Project** engages nearly 11,000 private organisations in health promotion activities such as smoking cessation and physical exercise. 15



3. Establish integrated care as the standard practice for the management of NCDs, including MASLD/MASH. MASLD/MASH is interlinked with other diseases such as obesity, cardiovascular disease and diabetes, yet it is not routinely considered in the clinical management of these common diseases.<sup>17</sup> This lack of integrated care is a missed opportunity for efficient, effective, simultaneous management of multiple NCDs, reducing the individual and societal impact of these diseases.<sup>17</sup> Lifestyle modifications and other nonpharmaceutical interventions, for example, play a part in combating multiple NCDs, including MASLD/MASH, but require population-level policymaking.<sup>17</sup> The World Health Organization's (WHO) Best Buys are policy interventions that target the key risk factors for NCDs such as physical inactivity, unhealthy diet, alcohol and tobacco use. Addressing these risk factors early plays an important role in preventing NCDs including MASLD/MASH in line with the field's other action priorities to turn the tide on steatotic liver disease.18-21

4. Expand the annual healthcare survey to include MASLD/MASH for a more comprehensive understanding of its healthcare impact and costs. The Ministry of Health, Labour and Welfare of Japan conducts an annual healthcare survey that collects providerlevel inpatient and outpatient data for more than 13,400 hospitals, medical clinics and dental clinics across the country.<sup>22</sup> Although the survey comprehensively incorporates key parameters such as patient age, sex, hospital stays, and primary and secondary diagnosis, it does not include MASLD/MASH as a diagnosis. A recent study highlighted the ongoing need to better quantify the MASLD/MASH-related burden in the country, including estimates of healthcare usage and costs.<sup>23</sup> Expanding the health survey to include MASLD/MASH would enhance the health ministry's understanding of its clinical and cost impact, supporting evidence-based policy prioritisation and resource allocation. Implementing MASLD/MASH into the annual survey would face minimal hurdles, as the survey already covers other liver and metabolic conditions like viral hepatitis, diabetes mellitus, obesity, cardiovascular disease and kidney disease.



## Summary of key policy takeaways and opportunities for MASLD/MASH care and prevention in Japan

- 1. Use annual health check-ups to identify people at risk of MASLD/MASH to improve early detection and prevention.
- 2. Raise public awareness and understanding of MASLD/MASH.
- 3. Establish integrated care as the standard practice for the management of NCDs, including MASLD/MASH.
- 4. Expand the annual healthcare survey to include MASLD/MASH for a more comprehensive understanding of its healthcare impact and costs.



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