

# How BI is Changing the Way Health Data is Viewed by the Health Ministry and the Public

Opening health data to the Norwegian public to improve on government service and the public trust.



# Introduction

The Norwegian Directorate of Health is dedicated to driving excellence in health care and improving Norway's public health. As a subordinate agency of the Norwegian Ministry of Health and Care Services, it is responsible for monitoring conditions that affect public health and for identifying public health trends across Norway. The Directorate of Health is also in charge of implementing action plans and campaigns derived from the collected data to improve public health, which is reflected in the organization's motto: "Good health, good lives."



Helsedirektoratet

# Their Needs

The Directorate's target groups are **Norway's citizens (over 5 million)** as well as the health care industry professionals, the media and research groups. Specifically, those requiring information about health, health rights, care services, and those engaged in the provision of health and care services. As a result, one of the three key values of the Directorate of Health is Openness. The Directorate strives to have its work characterized by clarity, transparency, open processes, and clear communication to better serve its target groups.

Prior to the implementation of Dundas BI, the organization's **data was served to the citizens via static PDF files and reports with limited self-service capabilities**, mostly showing data in tables. **This limited the ability of the citizens to consume the data**, as it was difficult to understand it via tabular displays, rather than visuals that highlight trends and patterns in a simple way. **It was hard to navigate** the collection of files over the web and even more so via mobile devices. The **user experience was not engaging, and the data was static, preventing further exploration by users**. In addition, the Directorate itself was limited in its ability to publish new datasets and make sure publications cited were up-to-date due to the rather technical nature of the process.

Like many other organizations serving an extremely large group of users, the Directorate needed modernization to provide a better way for its users to explore, author new content and consume data with less IT involvement. However, contrary to most traditional BI cases in which internal users are often the primary focus, the **Directorate needed to serve external users first** and ensure that the public was provided with a much better user experience. They needed a completely **flexible BI solution that could be seamlessly embedded and integrated into their public portal**.

Additional complexity arose due to sensitivity around **data security and meeting the requirements of Norway's strict health information privacy laws**. The Directorate needed to provide information to external users anonymously and even hidden at times to keep the right data security in place. For example, while exposing the data about consumption of a new type of medication across different regions, the small populations in some regions could have allowed for citizens in those areas to understand their neighbor's health status by simply accessing the data.



# Why the Norwegian Health Directorate Chose Dundas BI

For the Directorate's team, Dundas BI presented the right technical fit for the solution with **easy integration into the Directorate's existing web portal** and deployment of interactive visual displays on top of Microsoft OLAP cubes data externally. Dundas BI was **built for embedding and integrating** so it was a straightforward process. The infrastructure combined with so much **flexibility** allows them to **securely manage their deployment** which was a key want in a BI tool.

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Dundas BI has enabled us to publish more data, more efficiently. Since we started using Dundas BI, business users are asking for it to create new content, resulting in a conversion of ~75% of our static reports to interactive visualizations, as well as many more new visualizations created.

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# Key Benefits

## ✓ Fast Content Development

Business users within the Directorate are now able to quickly generate interactive reports without depending on the help of IT - who used to create static PDFs.

## ✓ Scalability to Serve All

The solution allows for any (public) user log-on while keeping the data anonymized and secure.

## ✓ Improved Public Services

By opening the data in an interactive, visual way to the public, the Directorate is operating more transparently, allowing the public to view, analyze and use public data for meaningful purposes.

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Dundas BI has unique and amazing features that allow you to tell a story in infinite ways

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# Final Statements

With Dundas BI, the Norwegian Directorate of Health managed to open more data to the public, thus improving access, organizational transparency, and public health analysis. Overall, the tool enables the organization to improve government services when it comes to making data accessible and in turn, reap the benefits of democratized data analysis by users across the globe.

