

Transforming data into value

Capturing vast amounts of physiological data is essential. Still, it can also lead to clinicians being overwhelmed and fatigued by it and not extracting valuable insights that impact patient outcomes.

Did you know...

- an adult patient in critical care can generate up to 1 GB of high-fidelity data per day?¹
- a 1,000-bed hospital can generate up to 1TB/day, 200,000 vitals per second or 7 trillion vitals/year?¹
- only 20% of healthcare data is structured?²

How do you leverage your patient monitoring technology for analytics to drive clinical excellence across your care areas?

Clinical Insights Manager-Viewer

Clinical Insights Manager-Viewer is a web-based application for the review, search, and extraction patient data to be used for research and quality improvement. Clinical Insights Manager (CIM) provides full high-fidelity waveform data and high-resolution numerical data at 1 second and beat-to-beat intervals.

Clinical Insights Manager, being a cloud solution, enables research collaboration and data sharing using both identified and de-identified high-fidelity data. High-fidelity data provides the data accuracy and quality which may support advancement in healthcare research for proactive and predictive measures.

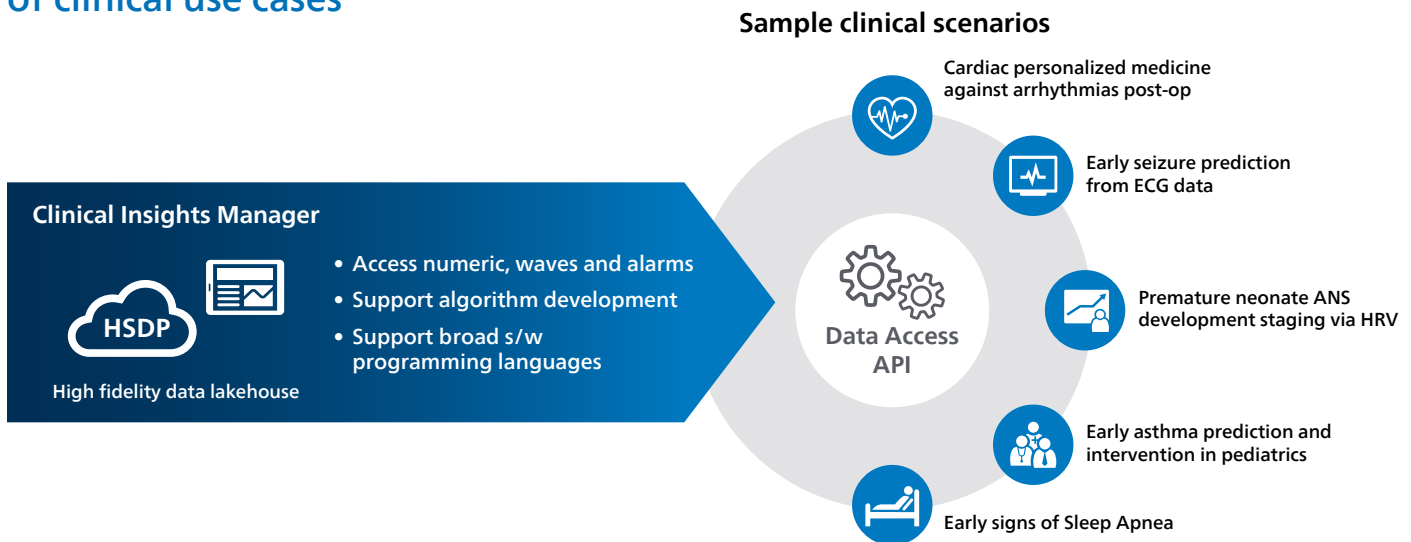
Clinical Insights Manager-Viewer

- Access retrospective patient-specific data over one year of prior history.
- Comprise complete patient information such as demographics, waveforms, numerics and alarms — in one intuitive view.
- Ability to search, review, and extract patient data (including the ability to de-identify data).
- Patient Data Auto Export — Multi Cloud Integration allows scheduling of export jobs as a predefined frequency and can integrate with a facility owned and managed cloud storage account such as Google Cloud Storage, AWS S3 or Azure Blob storage.
- Data Access API provides Enhanced QI/research support through fast and easy data migration including improved data quality.
- Aligns all data (alarms, numeric, and waveform) based on an event.
- Allows the user to export a single patient or multiple patient data to the user's local repository.



Patient information, waveforms, numerics, and alarms can be reviewed for a specific point or interval of time

Data Access API supports algorithm development for a broad range of clinical use cases



Key features:

- Supports the following types of API: authentication, restful API to query CIM data, status check
- Available for all software languages that support execution of restful API and parsing of response
- Data latency is dependent on volume and network bandwidth

Clinical Insights Manager

Available dataset includes:

- Patient ADT Information from the monitoring system, or ADT Interface
- High-fidelity/high-resolution data stores captured data to meet future “big data” needs
- Waveforms: 8 ECG (500 samples/sec) and 20 non-ECG (such as pleth, IBP, EEG, respiration, ventilation, flow, Paw, O₂)
 - 500 samples/sec diagnostic bandwidth
 - 250 samples/sec monitoring bandwidth
 - Stores a maximum of 2 limb leads with all chest leads
- Numerics and calculations: ~1024 ms resolution for periodic parameters, including HR, IBP and SpO₂. Aperiodic numerical parameters are stored when new measurements occur (NBP).
- Alarm, alert and event information, including technical alarms, event onset time, alarm announcement time and text, alarm silence times
- Third-party, interfaced devices: numerics, waveforms and alarms from non-Philips devices connected through the IntelliBridge EC10 and EC40 interfacing modules

Philips Clinical Insights Manager supports Healthcare’s Quadruple Aim in several ways

- **It can help support better health outcomes:** Clinical Insights Manager-Viewer allows access to retrospective data and improves visibility to details of patient care (waveforms, numerics, alarms) with the goal of helping hospitals to improve practices.
- **Improved patient and clinician experience:** Clinical Insights Manager-Viewer is a tool which may assist clinicians in determining the root cause of non-actionable/false alarms allowing for alarm improvement measures such as, reducing frequency of responding to nuisance and clinically irrelevant alarms that have been shown to be tied to sensory and cognitive staff overload.³
- **Potential lower cost of care:** Clinical Insights Manager-Viewer’s scalable cloud-based enterprise platform requires a virtual machine (VM) only which can eliminate the need for expensive servers.

¹ Based on Philips historical data collected at customer sites using Data Warehouse Connect.

² Innovations in Big Data Analytics for Healthcare – Frost & Sullivan, March 2017.

³ Lewandowska K, Weisbrot M, Cieloszyk A, et al. Impact of Alarm Fatigue on the work of Nurses in an Intensive Care Environment – A Systematic Review, Int J Environ Res Public Health. 2020;17(22):8409.

