

TransMed CARE™

Clinically Actionable Report Engine

Effectively translate biomedical discovery into clinical benefit

Translational medicine is a bidirectional discipline. Bench to bedside aims to increase the efficiency by which clinical therapies discovered in basic science, clinical research and population studies are applied to patients in the clinic. Bedside to bench aims to provide evidence based results of treatment to researchers to facilitate further discovery and care improvements.

Realizing the value of the translational medicine vision requires the following:

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- ### Highlights
- Inform clinical decision by translating discovery into clinically actionable information
 - Present sophisticated, personalized analytics based on clinical, molecular and all relevant data
 - Accelerate applying approved science in clinical practice
 - Enable continuous learning healthcare by collecting all results of personalized analytics to facilitate continuous discovery and care improvement

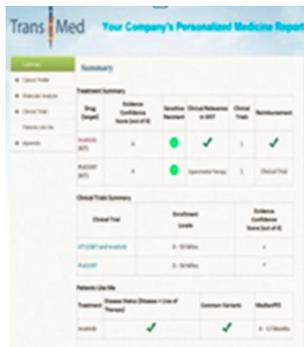
- Assembly and collaboration of a multidisciplinary team involving: biomedical research, clinicians, clinical trials staff, life sciences, computer science, biomedical statistics-informatics, Institutional Review Board to approve the translation from science into clinical application, etc.
- Efficient access to the vast amount and variety of healthcare data (clinical, genomic, cost, socio-economic, survey, etc.)
- An integrated and sophisticated suite of reporting and analytics tools to support the entire translational medicine workflow, from bed to bench and back to bedside.

TransMed CARE effectively and efficiently translates discoveries arising from basic science, clinical research, clinical trials and population studies into everyday clinical practice through informed decision support.

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Personalized Analytics Configurable Content

A vendor-specified, one-size-fits-all report has limited use for today's clinician. The information relevant for a critical care clinician is different than that relevant for an oncologist; even within oncology, often the breast



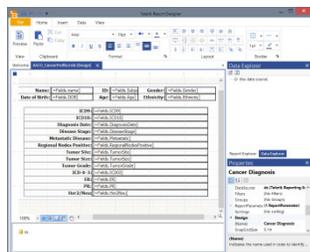
cancer clinician's need is different than that of the lung cancer clinician. CARE translates research discoveries by applying personalized analytics to individual patients. CARE allows your institution to create a wide variety of personalized analytics based on your research or

published research and then configure reports with their inclusion. Examples of the types of personalized analytics CARE can create and configure include: multi-dimensional scoring systems for conditions like ventilator associated pneumonia or pediatric early warning systems; pharmacogenomic assessments based on variants, gene expression, and pathway enrichment to help facilitate drug calls for cancer patients; or a heart rate variability based on r-r intervals from waveforms.

Configurable Format

When treating patients, clinician's today are inundated with an overwhelming volume and variety of raw data they must wade through.

Realistically, a clinician needs to see within a couple minutes the actionable information



in a personalized or evidence-based medicine report. Backup information must be easily accessible when the clinician feels further reference is warranted. CARE embraces this reality by enabling the institution to configure the report format (including an at-a-glance

overview) to meet the unique needs of their clinicians. IT staff can use their existing commercial reporting tools to configure CARE reports.

Similar Patients Configurable Content

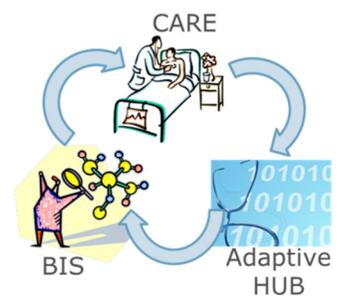
Since Adaptive HUB contains the organization's history of all patients, TransMed's integration between CARE and Adaptive HUB enables the report to optionally include historical experience with similar patients and their outcomes. For example, CARE can be configured to quickly identify a population of past patients with similar clinical and molecular traits to the current patient under treatment. Then, based on what is determined to be useful in clinic, CARE can include in the clinician's patient report simple statistics like counts of similar, historic patients by treatment, outcome and cost. CARE can also include sophisticated statistical analyses like an automated comparative effectiveness or survival analysis of the historic patient population cohort.

Continuous Learning Healthcare

Healthcare is constantly evolving. With every new patient's data comes the opportunity for new or updated discovery. CARE captures the personalized analytics in the Adaptive HUB aggregating it together with all the other healthcare data (including outcomes).

BIS can be used to retrospectively evaluate the accuracy of the personalized analytics. Ineffective personalized analytics can be re-evaluated and removed; while effective personalized analytics can be

further improved by updating statistical models based on additional data and new variables as the number of patients increases. The overall effect of using the TransMed suite in this integrated fashion is a continuously improving healthcare organization.



For more information

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