The Quantification Analytics Tool (QAT), is a modernized solution for country-led supply planning. Funded by USAID, QAT leverages new technologies and enhances the existing supply planning tool, PipeLine. With an enhanced user interface and usability, greater analytical capabilities and automated data exchange, this new tool enables program managers to optimize commodity procurement and delivery schedules, monitor the stock status of products and share data with external platforms and key stakeholders.

The QAT solution

- Web-based with offline synchronization: Provides users with automatic system updates, data exchange capabilities with other systems and improved control over master data.
- Integration, interoperability and Application Programming Interface (API): Includes close integration with GHSC-PSM’s procurement platform and has an API for data exchanges with other procurement and logistics management information systems. Provides csv, xml and Excel templates for the export or import of data to and from other systems.
- Modular design: Allows for designing and adding different modules to the core database (i.e. an upcoming forecasting module will not interfere with the existing supply planning module).
- Enhanced user interface: Features an enhanced interface that will still look familiar to experienced PipeLine users and includes translation into French, Portuguese and Spanish.
- Role-based access rights: Allows for differing levels of system access based on user profiles.
- Open source: Built on a free open-source software platform for use by multiple supply planning initiatives, ensuring sustainability.
- Inclusive of PipeLine legacy data: Allows the importation and storage of PipeLine data, eliminating the data gap between tools.

This comprehensive supply planning solution allows greater automation, integrative analytics and optimization.
How does QAT improve on existing planning software?

<table>
<thead>
<tr>
<th>Functionality</th>
<th>QAT</th>
<th>PipeLine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to work offline</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud-based</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>Modular design</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>Integration with external systems</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>Role-based access rights based on user profiles</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>Ability to add batch &amp; expiry data for supply planning</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>“What if” scenario planning</td>
<td>✓</td>
<td>✕</td>
</tr>
<tr>
<td>Data analytics and visualization</td>
<td>Enhanced</td>
<td>Basic</td>
</tr>
<tr>
<td>Supply planning logic</td>
<td>Enhanced</td>
<td>Basic</td>
</tr>
<tr>
<td>Freely available to all users</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Developed with user input</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**QAT Data Flow Ecosystem**

[Diagram of QAT Data Flow Ecosystem]

- **Forecasting Methods**
  - Health Based (Demographic, Services, Morality)
  - Logistics Based (Historical Consumption)

- **Supply Planning Data**
  - Consumption (Forecast/Actual)
  - Stock
  - Procurements

- **Tools in the strategic plan for Forecasting and Supply Planning**
  - Existing or In Progress Tool or System
  - Or Manual Reporting: Placed on top of system when manual data entry may inform this information source type

- **Forecasting**
  - Forecast Module
  - Modernized FASP Tool

- **Supply Planning**
  - Supply Plan Module
  - Forecast

- **Procurements**
  - Demand Driven Supply Plan from aggregation of subnational level sites
  - Site level Forecasts that could be aggregated nationally for high maturity countries

- **Early Warning Analysis Tool**

[Logos and social media mentions: ghsupplychain.org | @ghsupplychain]