The goal of Track20 is to transform the current family planning (FP) monitoring environment, which relies heavily on large national household surveys, to one which uses new tools and estimation methodologies that expand usage of existing country produced data, specifically service statistics (HMIS). Historically, FP service statistics have been underutilized and undervalued in program monitoring. Track20’s work to elevate country-owned routine data has been expansive from the start, with the project working at both the global and country levels to promote service statistics as a critical monitoring input and strengthen HMIS systems. Over the course of the project, Track20’s efforts and influence in the HMIS space have continued to expand. This brief describes the evolution of Track20’s HMIS-related work leading up to its current efforts to push family planning into the forefront of the emerging data ecosystem expansion.

Elevating Service Statistics
Track20 created the service statistics-based Estimated Modern Use (EMU) indicator, which has a standard methodology and can be derived from any country’s HMIS data. With the introduction of EMU, countries increasingly saw the value of their own service statistics as a means to track population-level changes in trends between surveys at the national and subnational level. A critical aspect of the Service Statistics to EMU (SS to EMU) tool used to calculate EMU is a comprehensive data quality review process that has improved the quality of countries’ routine data, and therefore increased users trust in the data. In addition, adding EMU as an input into Track20’s widely used Family Planning Estimation Tool (FPET) strengthens the modeled estimates of mCPR, unmet need, and demand satisfied. Beyond its benefit to country monitoring, EMU can also be used as a cross-country, standardized, international FP indicator.

Embedding Complex Analysis Within DHIS2
With countries reporting the value of the SS to EMU process in improving data quality and the utility of EMU as a routine monitoring indicator, Track20 explored ways to expand access to these tools and automate calculation of EMU to enhance its sustainable use. In line with the project’s commitment to strengthening existing data infrastructure rather than creating parallel systems, Track20 developed the Family Planning Module for DHIS2, which is embedded directly into countries’ existing HMIS system. Typically, routine data is extracted from DHIS2 to perform analysis and create visualizations in external systems and dashboards. This increases the chance of error, limits the timeliness of data, and limits access to the results. Importantly, this approach also makes project implementers the holders of the data rather than the government. Track20’s Family Planning DHIS2 Module includes high-level data displays of priority indicators for decision-makers, detailed analysis of programmatic indicators for program and M&E staff, and tools for reviewing data quality, developing additional analysis, and generating the EMU indicator for monthly monitoring – all within the government system. Countries have reported that the feature to create tailored automated reports that are easily shared and available throughout the system has resulted in significant efficiencies, freeing up M&E Officers to conduct additional data review and analysis. As of January 2024, the DHIS2 module is integrated into the HMIS systems of Afghanistan, Cote D’Ivoire, DRC, India, Kenya, Malawi, Nepal, Nigeria, Rwanda, Sierra Leone, Togo, Uganda, and Zimbabwe.

Expanding Access to Advanced HMIS Tools
Track20 took the learnings from the development and implementation of the FP Module and created the first family planning focused DHIS2 application available in the DHIS App Store, FP DataPro. Now all DHIS2 users can easily download the same automated environment into their DHIS2 systems that had previously been implemented on a country-by-country basis as the DHIS2 FP Module. Further, Track20 has expanded the new DHIS2 application to include a Maternal and Newborn Health (MNH) module in addition to FP. The same high-level summaries, informative graphics and maps and
validated data quality review process are available for both health areas. The FP module also includes automated monthly and annual EMU calculation.

The Expanding Data Ecosystem

The next phase of Track20’s HMIS work is to support FP’s transition to the expanded data ecosystem. DHIS2 was intended to function as a data repository, however, over time, countries have continued to expand the functions of the system to well beyond its original purpose – asking DHIS2 to calculate indicators (and house the additional demographic data required to do so), analyze data, prepare visualizations and dashboards, and more - all for multiple health programs. This over-reliance on DHIS2 has led to severe bandwidth issues that slow the system and limit its functionality, especially during prime use hours.

WHO’s FHIR-based SMART Guidelines provide a roadmap for improved data management, laying out what kind of policies are needed to manage a broadened and high-functioning health information ecosystem. They provide a template for how to build an interoperable system that repositions DHIS2 as a database, within a much bigger system that includes “data marts” for each health program. A critical part of implementing the FHIR interoperability standards is the development of infrastructure that merges previously siloed systems (such as vital statistics) and creates ways for each component to communicate while maintaining data security. This transformation is required for eventual use of electronic medical records, which is a long-term objective for most countries.

Within this new ecosystem, users from all health areas will no longer compete for bandwidth, but each use their specific health program data mart as the interface to conduct their day-to-day data treatment, analysis, and visualization. This will free up space within DHIS2 to include additional indicators and disaggregations that programs need for monitoring.

In addition to the benefits from a systems perspective, this approach allows for progress for programs. Each health program has more space to expand the systematic processing, analysis, and display of data. There is also an opportunity to leverage information across programs and to integrate data from other sources into combined spaces. For example, population data can be combined with service statistics across multiple health programs to better understand coverage and use of services. Currently, this type of analysis is done external to the system and is limited by the capacity available within each program and subject to data manipulation errors.

Track20 Interoperable Data Marts

Track20 has tested this approach in Zimbabwe, where the project worked with the CDC to pilot an expanded data ecosystem. When the CDC launched an HIV data mart, Track20 launched a new FP/MCH data mart and a complementary data mart (survey data, vital statistics, population, geospatial data, demographic data) that is useful across health programs. With a tested application, Track20 is now ready to help other countries maximize their use of HMIS data and develop an expanded data ecosystem through the paired implementation of the DHIS2 FP DataPro app and complementary data and FP data marts.

Putting FP at the Forefront of the Data Transition

An investment in this kind of transition is not a risk, but rather a necessity as it is key to achieving country e-health visions. This kind of investment is also timely as sexual and reproductive health donors can leverage the larger system investments PEPFAR and the Global Fund are making, including hiring high-level technical staff to manage HIS departments in countries making this expansion.

The FP/SRH field failed to claim a seat at the table during the development of DHIS2, resulting in inadequate representation of FP/SRH in DHIS2. As we approach this next transition in the data field, it is important that FP/SRH meaningfully engages or again risks playing catch-up for another decade. Investing in the development of FP/SRH data marts at the beginning of this expansion would also raise the profile of FP/SRH data and programs nationally and globally.