

B21: A Case Study of Thailand's Two-way Information Flow Between Interoperable Health Beneficiary Databases

- Who is this tool for? Health practitioners and other social protection officials and leaders looking to create bi-directional, or two-way systems of data linkage between health and other social programs. This means that both systems are able to make changes to beneficiary data on each other's databases.
- How was it produced? There are few well-documented examples of bi-directional updating capabilities between health insurance beneficiary databases and social registries. None of the participating countries in this collaborative had such capabilities. Therefore, the following case study was drawn up from available literature on Thailand's interoperable health insurance databases, as a discussion case for participants to consider during the course of the joint learning process.

Two-way systems for data exchange between different programs can be a useful mechanism for reducing duplication between targeting mechanisms, as well as reducing gaps in coverage when an individual changes status. In Thailand, for example, the system of universal health coverage is to have mandatory enrolment for all citizens into one of the three health coverage pools:

- The Social Security Scheme (SSS) for private formal-sector employees
- The Civil Servant Medical Benefit Scheme (CSMBS) for government employees, retirees, and their dependents; and
- The universal coverage scheme (UCS) for the remainder of the population.

For this system to work, it is important that there is no duplication between these systems (or it would be unclear which payer was responsible for the claim), and also no gaps (as this would leave some citizens unprotected). Therefore, a daily reckoning exercise is undertaken whereby individuals who have changed status (e.g. losing their job, or moving from a civil service job to the private sector) are transferred automatically into the appropriate scheme, as well as new births added and deaths removed. Each system has the 'right' to notify the others of changes in status and make changes across the other two - permissions that are grounded in detailed protocols as to when and how such changes should be initiated.

The three health databases are themselves linked to the universal population register maintained by the Bureau of Registration, meaning that those who might fall in between the gaps, including migrants, stateless persons and refugees, are quickly identifiable.

Fundamental to this system of interoperability are agreed data standards between each of the databases and, critically, a 13-digit identifier code that is assigned to every Thai citizen at birth. This unique, foundational ID enables the health system to ensure that everyone is included in one of the three health coverage schemes, and also that no one is duplicated. The ID number is also used to track



care utilization, vaccination status, and also produces vital statistics for public health and health system performance measurement purposes.

This level of interoperability was designed in at the start of the UCS system in 2001, when the Thai government was seeking to close the gap between the existing SSS and CSMBS systems (around a third of the population was not included in either). Because the foundational ID system operated by the Bureau of Registration has 99 percent coverage of the population, it was able to be used to identify those missing from the SSS and CSMBS systems: their beneficiary IDs were simply removed from the universal population register, leaving the 29 percent of the population who had no coverage, and were therefore automatically enrolled into UCS. This eliminated the need for a new enrollment campaign for UCS, likely saving years in delays.

Sources

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