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Strong on Technology and Weak on ‘Child Supportiveness’: How can China’s Social Assistance Management Information Systems be Strengthened for Children?

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8.1. INTRODUCTION

The essential benefit of management information system (MIS) technology relates to the knowledge that can be created through the purposeful management and use of MIS data. An MIS can be used to capture and store data about applicants and beneficiaries of social assistance programmes. Importantly, the MIS can then transform those data into various predefined formats and analyses to perform functions such as the targeting and identification of beneficiaries, the registration of beneficiaries, compliance with programme rules, grievance management and the monitoring of changes in child development outcomes.

This means that the ‘child supportiveness’ of the MIS depends on the ‘child relevance’ of not only the data contained in the MIS but also the data visualization, reporting system and other applications that transform the data into meaningful information, analyses, budget allocations and interventions for implementation. MIS strengthening can lead to the more equitable distribution of resources based on objective and comparable information; facilitate oversight of multiple schemes; establish links with other services and sectors; and increase the efficiency of delivery, by avoiding duplication of effort and enabling economies of scale.

The article was produced on the basis of a desk review of China’s social assistance policies and global MIS practices. It also includes information and

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knowledge collected through UNICEF China technical assistance to the three locations (Beilin, Linyi and Shucheng) since 2019. Such inputs include field visit reports, and interviews with key informants such as local government officials and academics.

The national-level discussion in this article outlines how China could integrate MIS technology across social assistance programmes and other public services. This refers to the integration of MIS across different government levels (vertical integration) and across different social assistance programmes (horizontal integration). This article will discuss how integration of MIS could potentially provide multidimensional data on children, which could enhance the tracking of children's multidimensional development against national targets, and more ambitiously, possibly even help to identify, track and tackle multidimensional deprivations at the level of the individual child.

For the local government discussion, the article focuses on social assistance implementation and management in three locations in China: Beilin District, Xi'an City, Shaanxi Province; Linyi County, Dezhou City, Shandong Province; and Shucheng County, Lu'an City, Anhui Province. Acknowledging the potential of the integration of MIS, and in light of China's decentralized implementation of social assistance, some local governments are moving forward with integration of social assistance MIS at their own administrative level. All such cases are at the initial stages of MIS strengthening, and this article will describe what is happening within their overall social assistance programming.

The article has two more sections as follows: Section 2 analyses China's national context to consider issues in national policy related to the strengthening of social assistance MIS, and local government experiences in the three locations (Beilin, Linyi and Shucheng) to show the varied practical efforts to strengthen social assistance MIS. Section 3 draws the experiences together by highlighting key issues in the social assistance system in China that need to be addressed by MIS strengthening to create more child-supportive social assistance MIS.

8.2. STRENGTHENING OF SOCIAL ASSISTANCE MIS AT THE NATIONAL AND LOCAL LEVEL

8.2.1. Strengthening of social assistance MIS at the national level

Integrating MIS technology entails three aspects: namely, setting up an MIS within each social assistance programme; linking the various MIS used in different social assistance programmes; and linking the various social assistance MIS to information systems for other public services. Of particular relevance to children's development are global experiences that suggest that integration of MIS can help to address multidimensional deprivations (Chirchir et al., 2021).

The hope is that integrated MIS combined with strong 'case management' of beneficiaries can broaden access to multidimensional interventions, including social assistance. In Brazil, Chile, Turkey and Uruguay, MIS have been integrated to increasingly act as gateways that enable people to access multiple services beyond those of individual programmes, and thereby gain a fuller range of multidimensional support. Case management by social workers is needed to ensure referrals to complementary services for vulnerable groups such as children, pregnant women and people with disabilities.

8.2.2. Possibility of integrating social assistance MIS in China

A UNICEF-supported analysis on the potential for the integration of social assistance MIS in China found that: (1) vertical integration across different government levels has occurred to some extent in the Dibao cash transfer programme;²² (2) horizontal integration across different programmes is occurring in a few provinces and counties; (3) the elements exist for the more systematic integration of MIS; and (4) a national strategy for the integration of MIS is lacking (Chirchir et al., 2021).

In terms of assessing China's preparedness to develop an integrated social assistance MIS, the country mostly meets the 11 criteria to do so (*see Table 8.1*). For instance, China already has an appropriate institutional set-up that currently delivers social assistance, strong political will to consolidate the achievements of poverty alleviation, and a central ministry responsible for coordinating the delivery of social assistance and developing guidelines for its implementation. Moreover, budget, operational staff capacity, hardware and software are not insurmountable barriers to the integration of MIS in China.

²² Dibao, also known as the 'minimum livelihood guarantee', is a means-tested national social assistance programme in China that provides cash transfers to poor urban and rural residents whose income falls below the minimum livelihood guarantee threshold (Dibao threshold). The programme tops up the income of beneficiaries to the local Dibao threshold. Implementation of the Dibao cash transfer programme is highly decentralized, with local governments defining the Dibao threshold, criteria for the selection of beneficiaries and the value of the transfer payments.

Table 8.1 Assessment of China’s preparedness for the integration of social assistance MIS

Dimension	Status	Requirement to support integration of MIS in China
Institutional framework	Partial	While the Ministry of Civil Affairs (MCA) is responsible for delivering social assistance, a special unit responsible for integration of MIS is needed
Political will	Strong	The Government of China has aimed to create mechanisms to capture the changing economic situation of low-income population to prevent the recurrence of poverty.
Coordination	Partial	MCA would need to strengthen vertical and horizontal coordination to ensure integration of MIS
Broader e-governance	Partial	Further assessment is needed on whether the e-governance system is sufficiently mature to be leveraged for integration of MIS
Legislative framework	Partial	Specific legislation for integration of MIS does not yet exist
Governance framework	Partial	Assessment is needed on whether MCA or another agency should be responsible for integration of MIS
Objectives and model of integration	Partial	Agreement by stakeholders is needed on the objectives and the model of integration
Budget	Strong	A detailed budget for integration of MIS should be developed
Civil registration and national identification systems	Partial	Assessment is needed of the civil registration, national identification and other registries that will link to an integrated MIS
Operational staff capacity	Partial	Staffing and training requirements need to be scoped
Hardware and software	Partial	Both hardware and software need to be scoped

Source: Adapted from Chirchir and Hu (2021).

Nevertheless, integration of social assistance MIS in China faces some practical challenges, including ensuring interoperability across all existing MIS; use of standardized indicators; upgrading of information and communication infrastructure for connectivity; data privacy and data security; human capacity at all operational levels of the integrated MIS; and institutional coordination.

8.3. STRENGTHENING OF SOCIAL ASSISTANCE MIS AT THE LOCAL LEVEL

This section discusses ongoing strengthening of the social assistance MIS in Beilin District (Shaanxi), Linyi County (Shandong) and Shucheng County (Anhui) (Shi, 2019; Sun et al., 2021). All three local governments are pursuing the integration of MIS to help them implement China's new social assistance system reforms, as outlined in 2020, but they are approaching the task differently.²³

Socio-economic situations differ in the three locations (*see Table 8.2*):

- Beilin is relatively rich, with gross domestic product (GDP) per capita equivalent to 178 per cent of China's GDP per capita. Beilin has secure social assistance funding and higher benefit levels compared with the other two locations (Linyi and Shucheng). Being urban, the district will have rural-to-urban migrants lacking an urban household registration (*hukou*), better information and communication technology (ICT) and other infrastructure, and a densely located population from which to collect data and to which to provide services.
- In contrast, Shucheng is relatively poor, with GDP per capita equivalent to just 39 per cent of China's GDP per capita. As a predominantly rural county, it has relatively worse infrastructure (the worst of the three locations) and a more dispersed population to serve.
- Linyi's GDP per capita is equivalent to 93 per cent of China's GDP per capita, meaning that the county is much more in line with China's upper-middle-income country status in terms of prosperity. Like Shucheng, the county is mainly rural with some urban areas. Linyi's social assistance system covers the smallest population of the three locations – it is about half the size of Shucheng's population – which has implications for the scale of its integrated MIS.

Table 8.2 Socio-economic indicators (2018)

Location	Urban vs. rural	GDP per capita (as % of China's GDP per capita)		Population
Beilin District, Xi'an City, Shaanxi Province	Urban	High	178	717,500
Linyi County, Dezhou City, Shandong Province	Rural	Average	93	553,900
Shucheng County, Lu'an City, Anhui Province	Rural	Low	39	996,376

Source: Calculations based on Shi (2019a), Shi (2019b) and Shi (2019c).

²³ In August 2020, the Government of China issued the *Opinions on Reforming and Improving the Social Assistance System*, which sets out a reform agenda that aims to build a tiered and classified social assistance system for both urban and rural areas and to benefit people in need more equitably through wider coverage.

8.3.1. Commonalities of the MIS across the three local governments

A common starting point for all three local governments is the Dibao cash transfer programme's MIS, under the leadership of China's Ministry of Civil Affairs (MCA). Its MIS is better integrated vertically than the MIS of other programmes for administrative reporting purposes. The data held in the system are reported quarterly by local governments and used nationally for overall administrative reporting. The Dibao programme's MIS also links to banking, housing, and vehicle registration databases for the purpose of income and assets verification.

Following the national reform agenda, all three local governments are pursuing a systematic approach to social assistance system strengthening. The goal is for a system that provides multidimensional support to those in need through a range of coordinated programmes and service providers. The design of the integrated MIS in each of the three locations also enables improved coordination of programme management and consolidation of programme data.

All three local governments have outreach with potential beneficiaries through 'one-stop shops' or social assistance offices at the township/subdistrict office level. These physical premises could serve the integrated functions of receipt of applications, collection of data and consolidation of services.

8.3.2. MIS strengthening scope and ambitions of the three local governments

Local Bureau of Civil Affairs (BCAs) each has their own social assistance MIS, and these vary in structure due to the diverse information needs in different locations. The connectivity and data transferability of MIS between different levels of government and among different programmes remains an issue.

Beilin's integration plans are modest in scope compared with those of the other two locations. Beilin intends to build an integrated MIS to accommodate all social assistance functions, including household assessment, referral to other services and resources, and coordination between social assistance management administrations. The local BCA of Beilin has no cross-departmental mechanism, although Beilin BCA confirms that there is good cooperation and communication among different agencies in charge of other sectors such as Education, Housing and Urban-Rural Development, Human Resources and Social Securities, and Healthcare.

The main objective of integration in Beilin seems to concern improving efficiency across BCA programmes (and is less about linking to other agencies). A community-level one-stop shop uses various MIS to process, verify and approve applications for Dibao, Tekun and temporary assistance, for which the local

BCA is responsible.²⁴ This one-stop shop does not, however, link to services from other authorities, especially not those child-relevant programmes on education, housing, orphans, disability and nutrition. Other authorities can maintain 'desks' in the one-stop shop, and referrals can be made to the All-China Women's Federation, trade unions and social organizations for help in accessing other services.

Linyi is the most ambitious of the three cases. Under its current institutional reform of the social assistance system, Linyi aims to integrate the MIS of all eight social assistance programmes, judicial assistance and charity assistance, plus those of programmes under social services. Income and assets data for assessing eligibility have been integrated at prefecture level (the administrative level above county) by Dezhou.

An MIS exists for Linyi that includes a beneficiary registry, data of low-income households (based on a local survey conducted in 2020), administrative data from social assistance programmes, monitoring and evaluation systems, and documents.²⁵ It is a single platform used to access various databases and information from various sources. As of 2019, the information system has been used mainly for administration and little analysis, planning or budgeting has been done using the system; it is not linked to services provision; and its functions are basic. Some social assistance programmes prefer paper-based management or their own system and just upload data into this information system as requested. Linyi BCA wants to include data on people at risk of poverty, as well as current beneficiaries of social assistance, in its integrated MIS. A mobile phone application has been designed and implemented to streamline applications to the Dibao cash transfer programme.

Shucheng's integration plans are the least ambitious of the three locations. Shucheng's social assistance system reform focuses on establishing a cross-departmental group of 16 agencies; a platform for social assistance; an integrated MIS; and innovations in social assistance approaches. But the local government's impetus for the integration of MIS resulted from pressure exerted by senior-level government officials, because of the siloed nature of the county's social assistance MIS and management. Supporting mechanisms do not yet exist in Shucheng for the integration of MIS. Political will of the local government and coordination between government agencies are needed, but it seems that

²⁴ The Tekun programme, which provides unconditional social assistance to the destitute, complements the family-based Dibao cash transfer programme. It provides support for basic daily expenses, daily care and medical treatment to specific vulnerable groups (people over 60 years of age, people with disabilities and children under 16 years of age) who have no work, no other source of income and no other support (also known as the 'Three Nos'). Temporary assistance is provided to families or individuals who, whether because they are not covered by other social assistance programmes or despite having such support, cannot guarantee their living necessities when an incident such as fire, traffic accident, incidental injury or serious disease occurs. The temporary assistance provides financial support to cope with the emergency situation during the transitional stage.

²⁵ The benchmark for 'low-income households' is a bit higher than the Dibao threshold. These low-income households are ineligible for Dibao transfers but will be considered for support from other programmes.

not all social assistance management administrations are fully involved in the discussions around developing an integrated MIS. At the request of BCA, a draft proposal was developed on the integration of MIS across Dibao, Tekun, temporary assistance and the verification system, including greater linkages vertically between all levels under BCA and horizontally with other services.

8.3.3. Discussion of the MIS of each location

8.3.3.1. Multidimensional vulnerabilities assessment

All three local governments are reinforcing their various MIS around **monetary selection criteria** for access to social assistance. Their integrations of their MIS have not been designed to assemble data for multidimensional vulnerabilities assessment, referring to services, and case management. The difference among the local governments is that Beilin uses multiple economic indicators to determine tiered levels of benefits and services; Linyi experiments with the indexing of multiple economic indicators; and Shucheng relies on monetary selection criteria supplemented with community identification of those in need.

Specifically, the locations vary in that:

- Currently Beilin uses its MIS to categorize families into four income tiers, which provide access to different social assistance programmes, thereby creating a hierarchy of support. The local BCA is trying to augment the income criterion by introducing indicators of hardships into the tier classification. A key assumption in this approach is that income is a sufficient proxy for multidimensional deprivations.
- Linyi's current social assistance MIS is still designed for applying monetary selection criteria using income, assets and catastrophic health costs. An economic hardship index was created but is not used in practice because it fails to identify all relevant people. The need to include multidimensional deprivations in selection criteria has been mentioned but not actioned.
- Shucheng applies monetary selection criteria and has no plans to develop a multidimensional measure. The local government believes that village leaders can identify families in need of assistance and that the practical application of a multidimensional measure would be complex.

8.3.3.2. Linking with services

Lacking the capacities to deliver all of the necessary social services, the three local governments recognize the possibility of using social organizations to help do so. Progress towards this option has been limited, however, because of challenges including a lack of enabling policies, regulations and operational mechanisms; that demand for the various social services is not being assessed

and the procurement service list is not yet available; and the fact that there are few social organizations and a low level of social worker professionalization.

With the exception of some elderly care services, Beilin's social services delivery is through government agencies. It has unused budgets for procuring services from social organizations. A social organization incubator is intended to cultivate new social organizations and develop their capacity to deliver social services. Social work is still too weak to deliver social services, however.

Linyi allows 3 per cent of its total social assistance budget for the external procurement of social services, but it lacks sufficient social organizations and professional providers to spend this budget. Like Beilin, Linyi has also established a social organization incubator.

Shucheng's local government acknowledges that social organizations would play a key role in service provision. Yet, professional social work organizations are limited in number. Shucheng is a rural county with a widely dispersed population. Shucheng has engaged a private elderly care institution to provide services to home-based poor old people, piloting in one mountainous township the mobile teams set up to provide basic monthly home-visit services, such as cleaning, washing and hair-cutting.

Skilled and informed social workers should be a key link between the social assistance system and deprived children, and an integrated MIS could play a role in developing this link by providing relevant data, information and analysis. The local governments could use this type of knowledge to better define their multidimensional social service procurement needs and contracts, and to define more effective work on incubators to develop social organizations. The volume and quality of information and knowledge made possible by an integrated MIS could stimulate attention and investment by non-governmental actors to build social organizations that support children's needs.

8.4. CONCLUSIONS

Integration of the various social assistance MIS has huge potential to enhance planning, monitoring and implementation of programmes and, ultimately, outcomes for beneficiaries, including children. First, by comparing the programme targets with the current status quo, the integrated MIS can inform the optimal resource distribution of social assistance programmes, enhancing the allocation efficiency of human and financial resources. Second, by collecting data and analysing multidimensional deprivations of existing and potential beneficiaries, it can accurately target people in need, reducing exclusion and inclusion errors. Third, by digitizing information, the integrated MIS can better detect the needs of beneficiaries, informing responsive case management and referring beneficiaries to broader social services. Fourth, it also enables programme monitoring in real

time, increasing the transparency and accountability of government at all levels. Finally, by aggregating the information at the national level, the integrated MIS can demonstrate a rather comprehensive picture of the strengths and weaknesses of the current social assistance system, supporting policy adjustments so that the system is aligned with national plans and goals.

While the potential is huge and the overall design principles for the integration of social assistance MIS are clear, there is less clarity on ‘what has worked’ or about alternatives in implementation. In the absence of a national strategy for the integration of social assistance MIS in China, local governments are providing their own answers and creating diverse MIS, in terms of both technological scope and social protection purpose. The same technological approach (integration of the different MIS) has been adopted to implement the same policy (the Government of China’s social assistance system reforms launched in 2020). Each local government has a somewhat different idea, however, about how to use MIS to further its social assistance system reforms. Local governments are finding their own solutions based on local needs, and this is creating diverse approaches across China on the integration of MIS.

A key step is to develop a national strategy for the integration of social assistance MIS, to agree on the objectives of such integration and to provide guidance on solving practical challenges, thereby promoting a more consistent and coordinated development of integrated social assistance MIS across local governments. Potential objectives of integration include oversight of programmes; efficient administration of the social transfer programmes; reporting to policymakers; planning of resources; tracking of multidimensional development; support to broader social services; prevention of error, fraud and corruption; programme efficiency and effectiveness; and monitoring of programme implementation. The relative emphasis on the various potential objectives of integration (for example, whether the integrated MIS shall focus more on adopting multidimensional assessment or on improving income targeting), and the details of how the integration of MIS helps to pursue those objectives, needs to be agreed upon and set out in a national strategy. This will shape what data go into the system and what technologies are developed to use those data.

To move forward, the strengthening of MIS for the benefit of children in China requires more than just investment in technology. It would require designing the system with children in mind. The integrated MIS needs to have child-relevant data to track children’s multidimensional needs. Such data need to be accessed, analysed and used by social workers to inform responsive service delivery for children. Beyond monitoring programmes, the integrated MIS also needs to be aligned with the overall child development targets and plans. Needless to say, inclusion eligibility, linkages between the integrated MIS and various kinds of services, the capability of social workers, and the division of responsibilities and authority within government are all decisive factors for the effectiveness and efficiency of a child-supportive social assistance MIS.

8.5. REFERENCES

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