

Identifying barriers and enablers in accessing physical specific allocation funds for health (Dana Alokasi Khusus Fisik Kesehatan/DAK-FH)

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Abstract

Indonesia underwent a major governance transformation in 1999 through the implementation of a decentralization policy that shifted authority and responsibilities from the central government to regional governments. One of the major transformations was the implementation of the Physical special allocation fund for health (DAK-FH). This fund was designed to support specific health infrastructure development at subnational level. In the health sector, DAK has been implemented for more than two decades. However, various challenges remain in both the planning and absorption of the funds at national and subnational levels. This study aims to identify barriers and enabling factors in the utilization of the fund and examine the policy changes that influence the fund utilization and to examine the policy changes that occurred between 2020 and 2025. Focus group discussions (FGDs) and semi-structured interviews were conducted with national and subnational governments to evaluate the barriers and enablers in fund utilization. Document analysis was employed to examine policy changes related to fund utilization. Findings indicate key barriers, including frequent regulatory changes, misalignment between central and subnational planning processes, and limited technical capacity due to staff turnover. Enabling factors include improvements in information systems and the ability of local governments to adapt to policy changes. Strengthening coordination between national and subnational governments will be essential to maximize the effectiveness of decentralized health financing and to better support equitable health system development across Indonesia.

Background

Indonesia underwent a major governance transformation in 1999 through the implementation of a decentralization policy that shifted authority and responsibilities from the central government to regional governments (1). This reform was initially regulated under National Law No. 22 of 1999, which was later revised twice, first by Law No. 32 of 2004, and then by Law No. 23 of 2014, to further refine the distribution of governance roles and responsibilities (2–4). The main goal of this decentralization was to improve public service delivery by bringing decision-making closer to local communities and allowing regional governments to develop policies and programs that address their specific needs. To address disparities in regional fiscal capacity, the national government also introduced the *Dana Alokasi Khusus* (DAK) in 1999 as a targeted transfer mechanism (5). DAK was officially implemented in early 2001 and was designed to support specific sectoral programs at the subnational level, including those related to infrastructure, education, and health. Its core objective is to ensure that regions with limited fiscal capacity can still meet minimum service standards in line with national development goals. DAK is dispersed to two main types: *DAK fisik* (DAK-F) that aims to fund physical infrastructure and equipment, and *DAK non-fisik* (DAK-NF) for operational and non-infrastructure support. Within the health sector, a specific component of DAK-F, known as DAK Fisik Bidang Kesehatan or DAK-FH, is allocated to finance the health facilities infrastructure as well as the procurement of medical equipment needed to strengthen health service delivery at the subnational level.

The legal and regulatory framework surrounding intergovernmental transfers has continued to evolve. The most recent and significant reform was introduced through Law No. 1 of 2022 on Fiscal Relations Between the Central Government and Regional Governments (6, 7). This law emphasized performance-based budgeting and output-oriented fund allocation, reinforcing the need to assess how fiscal transfer mechanisms such as DAK-F are planned, executed, and monitored at the local level. In the health sector, DAK-FH has played a critical role in strengthening service delivery by funding infrastructure, medical equipment, and human resources, particularly in underserved areas. DAK-FH has also served as a key policy instrument for the central government to implement national priority health programs at the subnational level. While short-term evaluations suggest that DAK-FH has contributed to narrowing health service gaps, several studies reported challenges particularly in fund absorption and utilization, which are often hindered by technical, administrative, communication and regulatory bottlenecks at both national and subnational levels (8–10).

To the best of our knowledge, existing studies on DAK-FH absorption have been limited in scope and largely localized, with little attention given to the perspectives of national-level policymakers and implementing agencies. Consequently, the governance processes that shape DAK-FH planning, allocation, and implementation remain insufficiently understood. Given its strategic role in financing health infrastructure and supporting service delivery across diverse regional contexts, DAK-FH provides a valuable case study for examining how targeted fiscal transfers are designed, implemented, and monitored within a decentralized governance system. By exploring policy evolution, stakeholder perspectives, and operational challenges, this study aims to identify the barriers and enabling factors influencing DAK-FH implementation in the health sector. The findings are expected to generate lessons for strengthening the governance of targeted fiscal transfers and contribute to efforts to improve the equity, efficiency, and effectiveness of health service delivery across Indonesia.

Objectives

This study aims to examine the policy changes that influence DAK-FH implementation, identify barriers and enabling factors in the utilization of the fund, and assess how these factors affect equitable access to and utilization of the fund across regions, including remote and underserved areas.

Methods

We employed focus group discussion (FGD), semi-structured interview, combined with document reviews. Participants from national and subnational governments were purposely selected. We followed a critical appraisal skills programme (CASP) qualitative studies checklist to guide our methodology and report (11). Informed consent was obtained from all participants, with written consent forms distributed and verbal confirmation obtained prior to the commencement of each interview to ensure participants' willingness to take part in the study. Ethical approval for this research was granted by the Health Research Ethics Committee of Universitas Pancasila (No.190/KEPK-FFUP/X/2025).

Data Collection

Focus Group Discussions (FGDs)

FGDs were conducted between October and November 2025 through online (80%) and in-person meetings (20%). We purposively selected subnational governments based on internal data identifying districts/cities with low and high levels of DAK-FH absorption, as well as geographical representation from western, central, and eastern Indonesia, to enable comparative insights and enhance the generalizability of findings at the national level. These representatives from each institution are champions within the organization that have hands-on experience in working with DAK-FH planning and implementation. Participants without relevant experience in planning or implementing DAK-FH were excluded, as were subnational governments that had not received DAK-FH funding within the past five years. Participants were recruited through official institutional channels and professional networks. In qualitative research, determination of sample size does not follow a fixed formula, rather it is typically guided by data saturation (12, 13). Consistent with qualitative research principles, data collection was continued until no substantially new themes emerged (14). The FGDs lasted approximately 90 minutes, and all participants were not provided any compensation. The questions for both national and subnational governments cover topics related to barriers and enablers of DAK-FH planning, allocation and implementation.

Interviews

Interviews were conducted around November to December 2025 through online (70%) and in-person meetings (30%). Participants from four national ministries/agencies were included in the study. At the national level, participants were drawn from directorates or directorate generals within the Ministry of Health, Ministry of Finance, Ministry of Home Affairs, and the Ministry of National Development Planning who are directly involved in the planning, design, and regulation of DAK-FH. Each in-depth interview lasted approximately 60–90 minutes, and no compensation was provided for participants. Similar to FGDs, the interview questions cover topics related to barriers and enablers of DAK-FH planning, allocation and implementation.

Document Analysis

To enhance the depth of analysis and enable triangulation with interview findings, we conducted a review of official policy documents. Only official documents which directly regulate DAK-FH were selected. These documents were obtained from government websites (<https://peraturan.bpk.go.id>, and <https://kemkes.go.id>), based on guidance from Ministry of Health informants regarding the key regulations underpinning the DAK-FH policy process.

A total of 9 policy documents were included in the analysis, comprising Presidential Regulations (*Peraturan Presiden*, n = 6) and Ministry of Health Regulations (*Peraturan Menteri Kesehatan*, n = 3). The timeline of their issuance is presented in Fig. 1. Policy documents from other ministries (e.g., the Ministry of Finance) were excluded as they were deemed not directly relevant to the governance and operational aspects of DAK-FH within the scope of this study. Additionally, non-official materials such as presentation slides were excluded unless it was referred to by participants to ensure the reliability and validity of the data sources.

In terms of regulatory structure, the governance of DAK-FH is primarily established through Presidential Regulations, which provide overarching policy direction, followed by Ministry of Health Regulations that serve as technical operational guidelines (*petunjuk teknis operasional*). Historically, these technical guidelines were issued on an annual basis to align with evolving national health priorities and programmatic needs. However, since 2023, a policy shift has occurred whereby the technical operational guidelines are no longer issued annually, while presidential regulations are issued every several years, based on the needs from changes of national priority.

Data Analysis

Interviews and FGDs were conducted in Indonesian. All interviews and FGDs, both in-person and Zoom, were audio recorded. The interviews and FGDs recordings were then transcribed and coded. To ensure privacy and confidentiality, all interviews and FGDs transcripts were anonymous. The study employed thematic analysis following Braun and Clarke's (2006) framework to identify themes defined as meaningful elements derived from codes that reflect patterned responses within the dataset (15). The process began with data familiarization, which involved listening to audio recordings and repeatedly reading the transcripts to gain a comprehensive understanding of the data and to detect recurring patterns of meaning, leading to the development of inductive codes. Subsequently, responses expressing similar ideas were grouped under the same categories. During this stage, each category was further reviewed to ensure that the researcher accurately interpreted the underlying meaning of the data. The coding was conducted using NVivo 15 (Lumivero, Denver, CO). After codes were generated, themes were developed by discussion between the research team, and findings were reported.

Results

In total, 9 districts participated in the FGDs, with 3–7 participants in each FGD. The participating districts were selected from the western, central, and eastern regions of Indonesia. Two of these districts were classified as underserved regions based on Presidential Decree No. 63 of 2020(16). Of all these districts, the participants in the FGDs consist of representatives from Bappeda (Regional Development Planning Agency), local public health agencies, and BPKAD (Regional Financial and Asset Management Agency). For the in-depth interviews, representatives from 4 relevant ministries participated in the study. These

participants were individuals with hands-on experience in the planning and implementation of DAK-FH. Details of frequency of FGDs and in-depth interviews can be seen as follows (Table 1).

Table 1
Frequency of FGDs and Interviews

Institution	Frequency of FGD/interview	Total Community Health Center (Puskesmas) (15)	
Focus Group Discussions (FGDs)		Non-remote areas*	Remote areas**
Western region district/city governments	3	80	14
Central regions district/city governments	2	25	9
Eastern regions district/city governments	4	22	51
Total FGDs	9		
Interviews			
Ministry of Home Affairs	1		
Ministry of Health	1		
Ministry of Finance	1		
Ministry of National Development Planning	2		
Total Interviews	5		
*): urban and rural areas			
**): remote and very remote areas			

For the FGDs and semi-structured interview findings, they are classified into three main categories: the evolution of DAK-FH, barriers to accessing DAK-FH, and enablers that facilitate access.

Evolution of DAK-FH Governance

Planning and Budgeting Cycle

The implementation of DAK-FH follows the standard DAK-F planning and budgeting timeline. The planning and budgeting process for the DAK-FH begins with the pre-proposal stage (February-April), during which the Ministry of Finance and Bappenas, together with relevant ministries/agencies, formulate policy directions by considering the National Medium-Term Development Plan (*Rencana*

Pembangunan Jangka Menengah Nasional/RPJMN), Presidential directives, performance evaluations (i.e. absorption and output), funding synergies, and the Medium-Term Expenditure Framework (*Kerangka Pengeluaran Jangka Menengah/KPJM*). This stage is followed by multilateral meetings to agree on thematic priorities, targets, priority regions, and medium-term funding needs. In the proposal and recommendation stage (June-July), subnational governments prepare and submit proposals through the KRISNA system, which are then reviewed and recommended by governors acting as representatives of the central government (Fig. 1).

In the assessment stage (July-August), *Bappenas* and technical ministries evaluate the proposals based on their alignment with national priorities, output targets, and regional needs. The results of this assessment inform the allocation stage (September-October), where funding decisions are made by considering performance, regional fiscal capacity, and the agreed budget ceiling with the national parliament, and also determine the designation of priority locations (*lokus prioritas*). This is followed by the activity planning stage (October-December), during which subnational governments prepare and submit detailed activity plans for approval by relevant ministries and formalization in regional budget documents. The process concludes with the disbursement stage (January), when DAK-F funds, including DAK-FH, are transferred from the State General Treasury Account (*Rekening Kas Umum Negara/RKUN*) to regional accounts (*Rekening Kas Umum Daerah/RKUD*), and implementation takes place during the fiscal year. In exceptional circumstances, such as natural disasters (*force majeure*), revisions may be proposed subject to verification.

Changes in DAK-FH Categories and Program Focus

Traditionally, in 2020, DAK-FH was categorized into three main groups: regular, assignment (*penugasan*), and affirmative (*afirmasi*) (17). The regular category focused on general basic service delivery, the assignment category targeted specific national priorities, and the affirmative category aimed to accelerate development in disadvantaged and border areas. In addition, there was a specific theme for improving health facilities in tourism areas.

Over time, this categorization evolved on an annual basis. It was later streamlined into regular and assignment categories, and by 2024 restructured into broader “fields” (*bidang*) and “sub-fields” (*sub-bidang*) (18). In 2025, the structure was further simplified into two main categories: health system strengthening and family planning (19). Despite these structural changes, the core programmatic focus remained largely unchanged, including efforts to reduce maternal and child mortality, strengthen health system readiness, control diseases, and support family planning. However, certain thematic categories, such as affirmative interventions and health facility improvements for tourism, were eventually removed.

Regulatory Adjustments in DAK-FH Implementation

In its implementation, DAK-FH can also be allocated for supporting activities (*kegiatan penunjang*) (20). These include planning and design for contractual activities; procurement and tendering costs; fees for non-civil servant facilitators supporting self-managed (*swakelola*) activities; supervision consultancy

services for contractual works; coordination meetings at the subnational government level; and official travel to and from project locations for planning, monitoring, and supervision purposes.

Over time, several adjustments have been made to these provisions. In 2022, the allocation for review activities, particularly honoraria for inspectorates as district/city reviewers was removed (21). In 2024, a new clause was introduced allowing procurement processes to commence once the activity plan had been approved (18). Additionally, newly established districts/cities were permitted to apply for and receive DAK-FH funding.

Reporting, monitoring and evaluation

In general, the business process of DAK-FH planning and disbursement can be seen in the Fig. 2. District and city governments are required to prepare reports on the implementation of DAK-F, including the DAK-FH, covering fund absorption, achievement of activity outputs, technical implementation, and short-term outcomes (17). These reporting components serve as important inputs for future decision-making. In particular, fund absorption and output achievement are used as key considerations in determining DAK-FH allocations for the subsequent fiscal year, while short-term outcomes are incorporated into performance assessments, such as in the 2023 evaluation(22). Starting in 2021, an additional requirement was introduced mandating district and city governments to ensure the sustainability of completed activities, so that the outputs can be effectively utilized and properly maintained by communities and/or managing institutions after completion(23).

District and city governments are also responsible for conducting regular monitoring and evaluation throughout each fiscal year. These processes involve coordination across local government agencies (*Organisasi Perangkat Daerah/OPD*), including inspectorates, financial and asset management agencies, and regional planning agencies(17). The aim is to ensure alignment between fund realization and output achievements across sectors, improve implementation to meet established targets, and assess the overall impact and benefits of the funded programs. Monitoring and evaluation activities are reported through the planning and budget performance information system, named KRISNA (*Kolaborasi Perencanaan dan Informasi Kinerja Anggaran*), which was introduced in 2021(23).

Barriers in Accessing DAK-FH

Policy dynamics

The regulatory and policy landscape governing DAK-FH is characterized by a high degree of dynamism, with frequent changes driven by shifting national priorities. While such flexibility allows alignment with evolving policy agendas, it reduces planning predictability at the subnational level. Regulatory updates are often introduced within limited timeframes and are not always aligned with local conditions, which require district and city governments to repeatedly adjust planning documents and revise funding proposals. This results in increased administrative burden and inefficiencies in the planning process. This administrative burden was highlighted by the local district government during the FGD. As

mentioned by one of the local public health agency representatives in central province *“The dynamic of DAK-FH in terms of changing regulations has become a challenge for us to adapt”* [Participants from central region, Transcript 14F, Page 17].

In addition, vertical coordination between central and subnational governments remains a persistent challenge. Stakeholders at the district and city levels reported constraints related to delays in the issuance of technical guidelines (*juknis*), changes or removal of eligible funding menus, and the centralized determination of priority locations (*lokus*). These factors collectively limit the ability of subnational governments to plan proactively and align local priorities with national directives.

“Perhaps the most important thing is the technical guidelines (Juknis), sir. We can’t plan any activity without referring to them. So, when the guidelines are clear, our process will naturally follow that direction. In that way, everything can be properly organized in sequence. We need to avoid situations where we create new guidelines, but some parts of the activity are still missing. Otherwise, the whole plan can become unstable or fall apart” [Participants from western region: Transcript 8F, Page 6].

Another challenge identified by participants was uncertainty in the determination of priority locations (*lokus*), which directly influenced the final allocation of DAK-FH resources. Participants reported that the number of approved locations could be changed during the assessment process, while in some cases the final locations selected were different to what they proposed. This situation ultimately affected the preparation of regional budgets (*APBD*) and constrained the timely implementation of infrastructure development. From the ministry's perspective, attribution to these discrepancies were resulted from the unreliable data input by subnational governments (including their health facilities), which led to disagreements regarding priority locations and final funding allocations.

Procedural and Administrative Issues

Procedural and administrative complexities represent a major barrier to the planning and implementation of DAK-FH. Data integration and coordination across levels of government are often hindered by the use of multiple, non-integrated platforms, resulting in inconsistencies and duplicate data-entry requirements. The planning process, particularly through the KRISNA system, involves multiple stages of verification by district health offices, regional planning agencies (*Bappeda*), and national ministries. Although these procedures are intended to strengthen accountability and transparency, participants reported that they frequently prolong timelines and increase administrative burden. Delays are further compounded by incomplete supporting documentation, repeated revisions, and frequent changes to funding menus, activity classifications, and account codes. Such changes often occur after proposal preparation has begun, requiring local governments to revise planning documents and re-enter data across multiple systems. As one participant explained:

“When we submit our proposals, we have already prepared the activity plans in detail, including the activity descriptions and account codes. However, new activities or different account codes sometimes appear

unexpectedly. As a result, we must revise everything, from the activity plan to the annual work plan, which creates a substantial amount of additional work.” [Participant from western region: Transcript 8F, Page 2].

Technical bottlenecks also affect implementation. Participants reported delays in the availability of the national e-catalogue system, which slowed procurement processes and postponed project implementation. Difficulties in meeting readiness requirements and delays in contract finalization further affected the timely disbursement of funds, particularly in regions with limited administrative capacity. These challenges were reported more frequently by participants from remote areas. *“Because they were slow in processing the e-catalog. It hasn’t been completed yet, they (the central government) said. Of course, we haven’t reached the final deadline yet. Fortunately, all contracts have now been finalized, and we are just waiting for the second phase of disbursement”* [Participants from western region: Transcript 11F, Page 4].

Land ownership issues represent an additional barrier to accessing DAK-FH, particularly for health infrastructure projects in rural and remote areas. Subnational governments are required to demonstrate legal ownership of the proposed project site; however, many facilities are located on land owned by village governments rather than district or city governments. Consequently, land must first be transferred through a Land Grant Deed (*Surat Hibah Tanah*) before a proposal can proceed. Difficulties in securing land ownership certificates or completing transfer procedures often render projects ineligible for funding and, in some cases, lead local governments to withdraw proposals altogether. This challenge was highlighted by both subnational and national stakeholders.

“This land issue is the most difficult issue for us to resolve because, as mentioned earlier, the time limit (for proposal) is very tight, so if we have to resolve the land issue as soon as possible, it is impossible because we know that the land in Papua is not privately owned or certified land, on average, the land that is suitable and the procedure for land transfer is also quite complicated, we have to do it several times.” [Participants from eastern region: Transcript 7F, Page 7–8].

Subnational Human Resource Capacity

Limited human resources and technical capacity at the subnational level further constrain the effective planning and implementation of DAK-FH. Many local government agencies (*Organisasi Perangkat Daerah*, OPD) reported insufficient staffing to support the updating of supporting data and the preparation of proposal submissions. These challenges are compounded by tight administrative timelines and frequent administrative changes, making it difficult for staff to meet submission deadlines. Staff rotation and reassignment add more challenges, as turnover disrupts institutional memory and delays technical processes, particularly those related to administrative compliance and the interpretation of updated technical guidelines.

Technical capacity also varies considerably across regions. Newly assigned personnel often lack familiarity with planning procedures, information systems, and regulatory requirements, contributing to delays in document preparation, repeated proposal revisions, and difficulties in aligning local priorities

with national criteria. As one participant noted, *“Staff turnover at the district level is very high. Sometimes we have already trained personnel, but they are suddenly transferred to another department or agency”* [Participant from eastern region: Transcript 12F, Page 7]. These personnel constraints are even more devastating in remote areas as there are a limited number of competent workers.

Enablers in Accessing DAK-FH

Information System and Support Mechanisms

The KRISNA system plays a critical role in facilitating the planning process of DAK-FH, particularly when functioning effectively. As an integrated digital platform, KRISNA enhances the efficiency and standardization of proposal submission by enabling subnational governments to prepare, upload, and revise proposals in a structured and streamlined manner. The system also supports real-time monitoring, allowing users to identify and address gaps in required documentation more promptly.

These features contribute to improved timeliness in the planning process while strengthening transparency and accountability in fund management. In this regard, KRISNA serves not only as a technical tool but also as an institutional mechanism that helps reduce administrative fragmentation and improve coordination across levels of government. However, its effectiveness remains contingent on system reliability and user capacity. *“KRISNA is really helpful to make all the processes more seamless. However, in an underserved region like ours, sometimes when the internet signal is not stable, it is impossible to access the application”* [Participants from eastern region: Transcript 13F, Page 9].

Participants reported that changes in the DAK-FH disbursement mechanism have influenced the implementation process. Prior to 2022, the first tranche of funding could be disbursed up to 25% of the allocated budget ceiling, even when only a single contract had been uploaded and verified in the system. Participants also noted that, in earlier years, an advance disbursement mechanism (*dana salur*) allowed a portion of funds to be released before supporting documents were fully submitted. This arrangement enabled subnational governments to initiate activities more quickly and provided greater flexibility during the early stages of implementation. However, this mechanism was subsequently discontinued following concerns regarding incomplete compliance with documentation requirements and weaknesses in financial accountability.

“Before 2022, up to 25% of the budget ceiling could be disbursed even if only one contract had been entered into the system. Now, if the value of uploaded contracts does not reach 25% of the total allocation within the sub-sector, the disbursement will not reach 25% of the budget ceiling. Instead, the amount disbursed corresponds only to the value of the contracts submitted for disbursement.” [Participant from western region: Transcript 11F, Page 14]

Local Government Adaptiveness and Internal Coordination

At the subnational level, a critical level of understanding among government personnel contributes to the effective management of the DAK-FH. Most participants demonstrated awareness of the inherently

earmarked and top-down nature of DAK-FH, recognizing the need for local priorities to align with centrally funded menus and regulations. This understanding fosters adaptive capacity, with local governments increasingly perceiving policy changes as an inherent feature of the DAK-FH mechanism, thereby emphasizing the importance of flexibility in planning processes. Furthermore, effective coordination across local government agencies (*Organisasi Perangkat Daerah*, OPD) plays a key enabling role. Strong inter-agency communication, clarity in identifying local needs, and commitment from regional leadership collectively strengthen the quality and responsiveness of DAK-FH proposals.

Discussion

This study provides a comprehensive analysis of DAK-FH governance by integrating perspectives from both national and subnational stakeholders. We use DAK-FH as a case study to examine the barriers and enabling factors influencing subnational governments' access to national infrastructure financing. Although this study focused on the health sector, DAK-FH shares similar governance arrangements with other intergovernmental fiscal transfer mechanisms in Indonesia, such as *DAK Non-Fisik* (Non-physical special allocation funds), *Dana Bagi Hasil* (DBH), and other centrally managed transfer schemes, all of which involve multi-level planning, appraisal, budgeting, and implementation processes. Across these mechanisms, the effective absorption of allocated funds remains a persistent challenge, with implementation performance serving as an important consideration in subsequent budget allocations by the Ministry of Finance. Therefore, the lessons learned from DAK-FH can inform future reforms to strengthen the governance of intergovernmental fiscal transfers and support more equitable and effective public investment across Indonesia.

Our findings suggest that policy dynamics at the national level substantially influence DAK-FH implementation. Changes to DAK-FH have largely occurred through gradual refinements rather than comprehensive reforms, which are relevant to Lindblom's concept of incremental policymaking (24). For instance, Ministries frequently adjust funding priorities, technical guidelines, and administrative procedures, to adapt with national priorities and lessons learned from previous processes. In recent years, these changes have increasingly emphasized accountability and oversight, as reflected in stricter documentary requirements and enhanced reporting mechanisms. While these reforms may strengthen governance and reduce the risk of fund misuse, participants reported that regulatory changes were often introduced within limited timeframes and insufficient dissemination or technical assistance. This reduced planning predictability and resulted in local governments repeatedly revising proposals and planning documents.

A key contribution of this study is the identification of how DAK-FH access challenges are experienced differently across regional contexts. Consistent with previous studies (25), districts in remote and underserved areas face greater difficulties in meeting site-readiness requirements, particularly those related to land acquisition and ownership transfer. These challenges are compounded by limited numbers of qualified personnel, high staff turnover, difficulties in maintaining up-to-date infrastructure data, and constrained institutional resources, all of which reduce the ability of local governments to

respond effectively to evolving regulatory requirements. Shortages of skilled health and administrative personnel have also been reported in other low- and middle-income countries (LMICs), where they undermine the implementation of public sector programs and weaken health system performance (26). Similar challenges were reported by past reports, indicating that these barriers have persisted over time despite ongoing policy reforms(27, 28).

The findings therefore suggest that future reforms should move beyond a uniform national approach and incorporate greater consideration of regional capacity differences. Strengthening technical assistance, simplifying administrative requirements for underserved regions, improving data quality and transparency, and providing more predictable policy guidance may help reduce disparities in access to DAK-FH. Such measures would not only improve implementation efficiency but also enhance the ability of DAK-FH to support equitable health infrastructure development across Indonesia. Thus, to mitigate these problems, we formulated policy recommendations as follow (Table 2).

Table 2
Policy recommendation

Category	Recommendations
Policy, funding, and governance	Policy ● Reduce frequent changes to DAK-FH administrative and budgeting mechanisms (e.g. activity/budgeting code) to expedite planning process ● Determine and communicate DAK-FH priority locations (<i>lokus</i>) before the regional budgeting (APBD) planning process begins, to enable subnational governments to align with their regional budget plan (APBD) and avoid duplication of funding; ● Introduce greater flexibility in eligibility criteria and explore multi-year funding arrangements to accommodate administrative bottlenecks, particularly those related to land acquisition, land ownership transfer, and other legal requirements; ● Increase the allocation of priority locations in remote and underserved areas to address persistent gaps in healthcare access, while reducing the concentration of DAK-FH investments in urban areas. Funding ● Provide early budget earmarking for DAK-FH to improve planning certainty and enable subnational governments to prepare infrastructure proposals more effectively
Central-subnational government relations	● Provide early-stage technical assistance and guidance to subnational governments on proposal preparation, system requirements, and regulatory updates before the proposal submission period begins. ● Establish national-subnational communication channels (i.e. instant messaging platform) for rapid coordination and problem-solving. ● Establish targeted mentoring and capacity-building support for low-performing districts, particularly those in remote and remote areas, to identify underlying implementation bottlenecks and improve access to DAK-FH.
Inter-agency coordination at subnational government	● Establish/maintain inter-agency communication channels (i.e. instant messaging platform), to facilitate timely information sharing, rapid problem-solving, and coordination among subnational stakeholders. ● Strengthen the role of District/City Health Offices in supporting health facilities with data validation, infrastructure assessments, and needs identification to improve the accuracy and quality of DAK-FH proposals.
Subnational Human Resource	● Ensure adequate staffing within district and city governments to support timely proposal preparation, submission, and implementation of DAK-FH activities. ● Strengthen leadership and institutional continuity in subnational governments through active engagement of local champions and senior leaders, supported by succession planning mechanisms to retain institutional knowledge and reduce the effects of staff turnover.

Category	Recommendations
	● Ensure sufficient and qualified personnel at health facilities to maintain accurate and up-to-date infrastructure data, providing a reliable basis for national needs assessments and funding decisions.
Information System	● Strengthen supporting information systems (e.g., ASPAK) to improve the accuracy and transparency of data used for national needs assessments and DAK-FH allocation decisions. ● Enhance KRISNA's feedback and tracking features to provide clear explanations for proposal rejection or revision, to provide transparency in the assessment process and the determination of priority locations (<i>lokus</i>).

Strengths and weaknesses

Strengths

To the best of our knowledge, this is the first study to provide a national-level perspective on the implementation of a specific national support fund for subnational governments. As such, the findings offer valuable lessons and practical insights that may inform decision-making and policy improvements at the subnational level. In addition, this study adopts a robust methodological approach by complementing interviews and focus group discussions (FGDs) with document reviews, enabling triangulation of data sources. This enhances the comprehensiveness of the analysis and provides a more nuanced understanding of how policy dynamics have shaped the design and implementation of the program.

Weaknesses

As representatives of the Ministry of Health (Kemenkes) and the Indonesia Health System Strengthening (IHSS) project, our positionality may have influenced participants' responses during data collection. Some participants appeared reluctant to share fully candid views, possibly due to concerns about how their responses might be perceived or potential implications for their institutions. This may have introduced a degree of social desirability bias in the findings. In addition, although the study focused on DAK-FH, several participants referred to experiences related to other national funding schemes or programs, which occasionally diverted the discussion from the primary topic. As a result, some responses may reflect broader interpretations of government assistance rather than DAK-F specifically, potentially affecting the precision and focus of the data.

Conclusions

The DAK-FH remains a significant funding mechanism to improve the health system and ensure that the remote regions can improve their facilities and infrastructure to serve their populations. However, its effectiveness in the planning and implementation are affected by policy dynamics, misalignment between national and subnational planning processes, and limited human resource capacity, particularly

in remote regions that continue to hinder optimal fund utilization and contribute to persistent inequities in the availability of healthcare services. At the same time, the presence of enabling factors such as improved information systems (e.g., KRISNA) and increasing adaptability among local governments are a signal for a potential in strengthening the planning and implementation processes. To maximize DAK-FH utilization, stronger coordination between central and subnational governments are expected with more predictable and carefully planned policies. There are also critical needs to improve local human resources capacity and improved data integration between the ministries. Addressing these challenges will be significant for remote regions to overcome the structural limitations that can widening the inequities.

Abbreviations

APBD	<i>Anggaran Pendapatan dan Belanja Daerah</i> / regional government budget
Bappeda	<i>Badan Perencanaan dan Pembangunan Daerah</i> / Regional Planning Agency
DAK-FH	<i>Dana Alokasi Khusus-Fisik Kesehatan</i> / Physical Special Allocation Funds for Health
DAK-Non Fisik	<i>Dana Alokasi Khusus Non Fisik</i> / Non-physical special allocation funds
DBH	<i>Dana Bagi Hasil</i> / Revenue Sharing Funds
Juknis	<i>Petunjuk Teknis</i> / Technical guideline
KRISNA	<i>Kolaborasi Perencanaan dan Informasi Kinerja Anggaran</i> / Budget Planning and Performance Information Collaboration System
OPD	<i>Organisasi Perangkat Daerah</i> / Regional Government Agency

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Health Research Ethics Committee of Universitas Pancasila (Approval No. 190/KEPK-FFUP/X/2025). Participation was voluntary, and informed consent was obtained from all participants prior to data collection. This study was performed in accordance with relevant guidelines and regulations stated in Declaration of Helsinki.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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Author Contribution

All authors developed research proposals and methodology. Stanley Saputra and Cynthia Maharani did data collection, transcribing, and data analysis. Stanley Saputra and Cynthia Maharani wrote the initial draft and Stanley Saputra prepared figures. Ellya Zalfa, Lander Bosch, and Naoko Ohno reviewed and revised the manuscript.

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Data Availability

All data supporting the findings of this study are available within its supplementary materials. Supplementary materials are available upon request.

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Figures

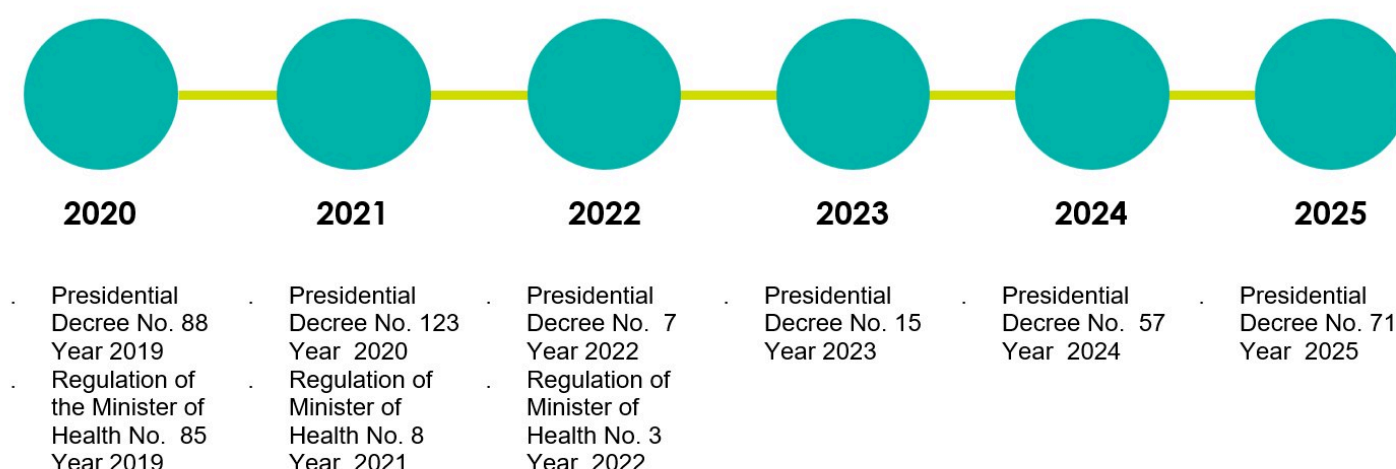


Figure 1

Timeline of the issuance of regulations in DAK-F

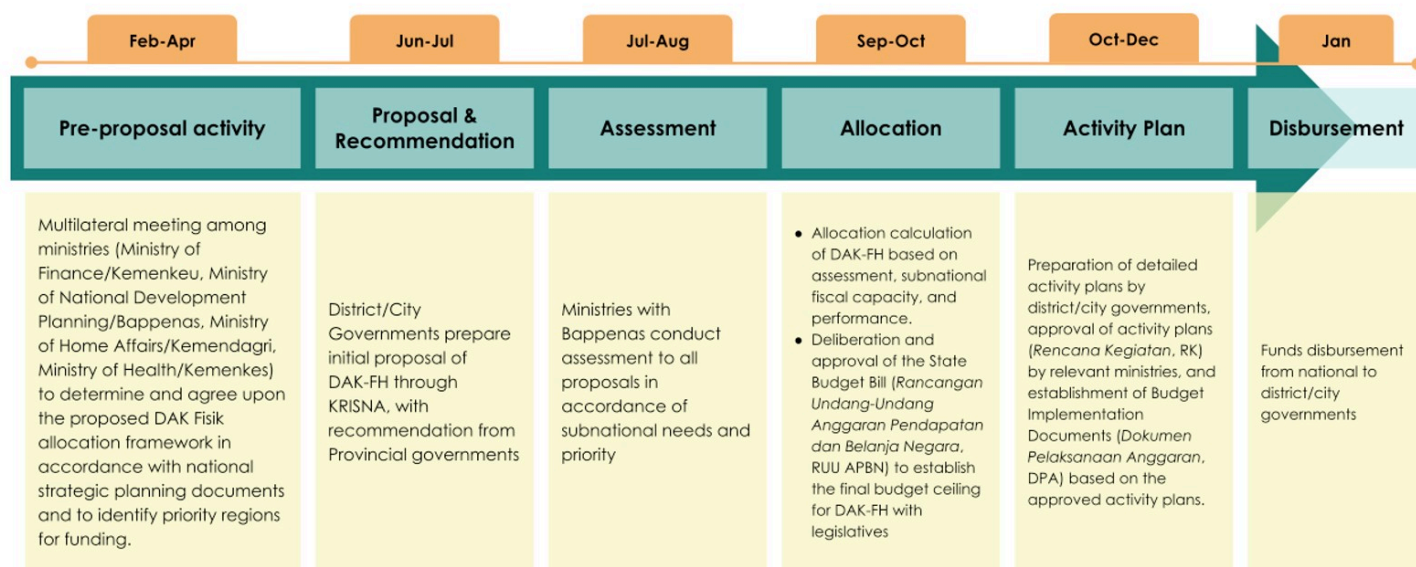


Figure 2

Business Process of DAK-FH planning and disbursement

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